University of Pittsburgh

Molecular Medicine Institute

300 Technology Drive
Room 206-Biotechnology Center
Pittsburgh, Pennsylvania 15219
Phone: 412-383-9750
Fax: 412-383-9760
http:// www.mmi.pitt.edu

Tuesday, February 01, 2005

0508-1013
PATENT

IN THE U.S. PATENT AND TRADEMARK OFFICE

In re application of

Mohamed CHOKRI et al.

Serial No. 09/194,053

Filed November 23, 1998

NEW ANTIGEN PRESENTING CELLS, A PROCESS FOR PREPARING THE SAME AND THEIR USE AS CELLULAR VACCINES

Confirmation No. 2743

GROUP 1644

Examiner Gerald R. Ewoldt

RULE 132 DECLARATION OF MICHAEL T. LOTZE

Commissioner for Patents
Washington, D.C. 20231

Sir:

I, Michael T. Lotze, hereby declare as follows:

I am Professor of Surgery, Molecular Genetics and Biochemistry at the University of Pittsburgh Cancer Institute and Director of Translational Research in its Molecular Medicine Institute. A summary of my background and relevant experience, and a partial listing of my publications, accompanies this declaration.

I was nominated to the Scientific Advisory Board of Immuno-Designed Molecules (IDM), the assignee of the above-identified application, in September of 2002. I am familiar with the content of International application PCT/EP97/02703 filed on May 15, 1997 and hence of the

above-identified application, which is continuation of the national stage of that International application. In addition, I have reviewed the claims that are now pending in the application, both prior to the amendment that I understand is being filed simultaneously with this declaration, and as amended by that amendment

I have also reviewed the most recent Official Action issued by the U.S. Patent Office in this application, and I understand the several positions now taken by the Patent Office with respect to the patentability of the claims of this application

I make this declaration to address the concerns raised in the Official Action that the MD-APCs first described in this application are not disclosed by the specification in such a manner as would enable a person of ordinary skill in the art to make and use the invention as claimed; and the further contention that the description of the invention provided by the specification would not have conveyed to a skilled person that the inventors were in possession of the invention as claimed at the time the application was filed.

1. The Specification Demonstrates the Production of a New Phenotype Possessing the Claimed Properties

In reviewing the outstanding Official Action in this case, I am left with the impression that the US Patent Office is unconvinced, as a threshold matter, that the specification actually teaches the production of the claimed new phenotype; and that the US Patent Office instead believes that the specification may have mistakenly attributed such a discovery to a mere mixed cell population containing conventional macrophages and mature dendritic cells. I write first to express my disagreement with that hypothesis, and to state several reasons that I believe demonstrate that position to be untenable.

I note initially that in the years following the May 15, 1997 International filing date of this application, the MD-APCs described therein (sometimes referred to under IDM's registered trademark "Dendritophage®") have gained acceptance in the scientific community as indeed constituting a new phenotype of antigen-presenting cell having particular utility in the field of cellular immunotherapy, in view of their properties of not only stimulating proliferation of T lymphocytes, but also possessing the ability to phagocytose both yeast and tumor cells, which combination of properties is not characteristic of either mature dendritic cells or conventional macrophages. See, for example, *Biochem J.*, **368**, 111-119 (2002), and *J. Biol. Chem.*, **278**, Issue 26, 23922-23929 (June 27, 2003), in addition to IDM's own numerous publications.

For the purposes of this declaration, however, I have been asked to confine my comments to the data and disclosure provided in the patent specification as filed on May 17, 1997, and to focus on the adequacy of that description as of that date.

A first observation in relation to the specification is that it states explicitly in numerous places that the techniques described therein do in fact produce new antigen presenting cells having this heretofore unattained combination of properties (see, for example, the specification at pg.1, lines 1-5; page 1, line 30 to page 2, lines 35). I am not sufficiently familiar with US patent practice to know whether it is proper for the recent Official Action to discount those statements, but, in any event, there are also clear experimental results in the specification that demonstrate the existence of the new phenotype claimed.

For example, Table 2 on page 17 of the specification provides a phenotypic analysis of the MD-APCs. Although no one of the individual mean intensity fluorescence (MIF) values given in that table are especially meaningful without identification of the standard used, nevertheless, the set of values and the *relative* magnitudes of those values in comparison to one another are highly significant in characterizing the new phenotype. Specifically:

- conventional macrophages do not normally express CD 83, whereas mature dendritic cells do express CD 83. Thus, the absence of any detectable signal for CD 83 in Table 2 indicates that the MD-APCs are not conventional mature dendritic cells, and do not contain such cells in any significant proportion.
- the CD 14/CD 64 values shown in Table 2, especially considered in relation to the HLA-DR value, are too low for macrophages, whereas the relatively high expression of HLA-DR is indicative of a good antigen-presenting cell, i.e., more like dendritic cells and less like macrophages.

The data in Table 2 considered collectively and comparatively is therefore consistent with the new phenotype described in the specification, but would not be consistent with a mixed population of mature dendritic cells and conventional macrophages, as posited in the Official Action.

Table 3 on page 18 of the specification is also indicative of the new phenotype. In that table, where each of the two columns of data of course adds up to 100%, it can be seen that relatively high percentages of the MD-APCs (whether prepared with or without GM-CSF) phagocytose six or more yeast particles after three hours' incubation, with a non-negligible percentage phagocytosing more than ten yeast particles. By contrast, a homogeneous population of conventional macrophages subjected to the same testing conditions would be expected to show about 40% of the macrophages ingesting no yeast particles after three hours, and about 60%

ingesting from one to five yeast particles over that time frame. In other words, Table 3 shows the MD-APCs of the IDM patent application to be even more strongly phagocytic than conventional macrophages.

It goes without saying that, because mature dendritic cells are much less phagocytic than macrophages, a mixed population of mature dendritic cells and conventional macrophages would be expected to shift the percentages in Table 3 even more strongly toward the zero yeast particle level, in further contrast to the data obtained for the new MD-APCs of the IDM invention. Thus, the data in Table 3 is also consistent with the new phenotype described in the specification, and inconsistent with a mixed population of mature dendritic cells and conventional macrophages.

The Official Action points to the data at page 5, lines 18-29, and particularly to the sometimes low percentage of MD-APCs that are said to express a given surface antigen, as evidence of a mixed cell population devoid of the claimed new phenotype. However, that position appears to overlook the import of the qualifying passage at page 5, lines 30-31, wherein it is noted that the properties appearing immediately above are expressed in terms of the measured intensities. The data thus relates to the immunofluoresence and flow cytometry analysis described in the specification at page 3, lines 14-21; page 4, lines 1-7; and page 5, lines 1-6. Therefore, a relatively low percentage value on page 5 merely suggests that the already low expression of the antigen in question was not detected for all cells; or, in the case of phagocytosis, that, not all of the cells will ingest yeast particles in the time allotted for the test. Furthermore, it would be expected by a person skilled in the art that the level of expression of the antigens would vary to some degree among the cells of a given population. That is, the same type of cell may express different levels of antigen depending upon the cell's development or physiological state. A level of expression of antigen expression that may vary to some degree from one MD-APC to the next does not indicate a mixed cell population. Therefore, I believe that the data and discussion in the specification demonstrate that the inventors of the IDM patent application were in possession of a new cell phenotype having the claimed characteristics, at least as early as the May 17, 1997 international filing date of the application.

2. The Specification Teaches How to Make the New MD-APCs

The specification teaches how to make the claimed MD-APCs at several levels of detail, see, for example page 10, lines 3-28; page 11, lines 7-33; and page 11, line 34 through page 12, line 29. These constitute a reproducible protocol for producing MD-APCs having the claimed characteristics.

The ligands used to create the MD-APCs were a combination of histamine and cimetidine in the examples most fully described, and it is also clear from page 14, lines 32-37 and Fig. 1b that MD-APCs were made by the alternative approach of using IL-13 as the ligand. It bears noting that IL-13 is involved whether it is added directly or whether histamine and cimetidine are used. When histamine and cimetidine are used, these ligands coact on the lymphocytes present in a mixed cell culture (monocytes + lymphocytes, see specification, page 11, line 16), with cimetidine blocking the TH2 lymphocytes and histamine stimulating the unblocked TH1 lymphocytes. The combined action of histamine and cimetidine thus acts to selectively stimulate the TH1 lymphocytes, which in turn leads to secretion of cytokines including IL-13.

When IL-13 is used directly, as described at page 14, lines 32-37 and in Fig 1(b), the specification does not indicate how much of the cytokine is to be used. Nevertheless, the *Biochem J.*, **368**, 111-119 (2002), and *J. Biol. Chem.*, **278**, Issue 26, 23922-23929 (June 27, 2003) articles referenced above show that the new phenotype is produced when IL-13 is used at quite conventional concentrations. In my opinion, the amount of IL-13 to be used would clearly be arrived at by a person skilled in this art after only quite routine experimentation.

The Official Action also suggests that, if the new MD-APCs are produced using IL-13, then a question would arise as to whether the claims are novel in view of the literature article Piemonti et al., "IL-13 supports differentiation of dendritic cells from circulating precursors in concert with GM-CSF," *Eur. Cytokine Netw.*, Vol. 64, No. 4, July-December 1995, pp. 245-252. However, the teaching of the IDM patent specification is quite clear that the monocytes are to be cultured in hydrophobic bags (see page 10, lines 10-12; page 12, lines 20-21; and page 15, lines 23-24 of the IDM specification). Thus, the culture of the monocytes in the IDM invention occurs with the monocytes in a non-adhered state. On the other hand, in the Piemonti article, it is clear that the monocytes were plated prior to culturing (see p. 246. left-hand column "[c]ells were cultured for 7 days at 5 x 105/ml in 6-well tissue culture plates..."; and p. 247, left-hand column, "[a]fter 7 days cell recovery for both cytokine combinations was usually 50-70% of the cells originally plated"). Adhered monocytes are of course a different phenotype than non-adhered monocytes, and it is therefore unsurprising that Piemonti and his colleagues produced cells quite unlike those of the IDM invention. It is therefore my opinion that that the IDM patent specification clearly teaches one of ordinary skill in the art how to make and use the new cell type disclosed.

The undersigned declare further that all statements made herein of their own knowledge are true and that all statements made on information and belief are believed to be true; and further that these statements were made with the knowledge that willful false statements and the like so

made are punishable by fine or imprisonment, or both, under §1001 of Title 18 of the United States Code and that such willful false statements may jeopardize the validity of the application or any patent issuing thereon.

Sincerely yours,

Michael T. Lotze, MD
Professor of Surgery, Molecular Genetics and Biochemistry
University of Pittsburgh School of Medicine
Director, Translational Research; Molecular Medicine Institute
Rm 411; 300 Technology Drive
Pittsburgh, PA 15219
412-770-9910 Office; 412-478-3316 Cell; 412-770-2201 Fax;
Email LotzeMT@upmc.edu

Date 2/2/05

CURRICULUM VITAE

Wednesday, April 02, 2003

Name: Michael T. Lotze, M.D.

Birth Date: July 11, 1952

Home Address:

Birth Place: Altadena, CA

Citizenship: U.S.A.

Home Phone:

Social Security:

Business: Professor Surgery, Molecular Genetics and Biochemistry
University of Pittsburgh Medical School

Address: University of Pittsburgh Cancer Institute
W1540 Biomedical Science Tower
Pittsburgh, PA 15261

Spouse: Joan Harvey, M.D.
June 25, 1977

Children:
Thomas, 3/30/79
Anna, 6/1/81
Michael, 11/3/83
Jenette, 11/24/88

Business Phone:

Fax:

E-mail Addresses:

EDUCATION AND TRAINING

Undergraduate		
1969-1973	Northwestern University Evanston, IL	B. Medical Sciences
Graduate		
1971-1974	Northwestern University Medical School, Chicago, IL	M.D. (Honors Program in Medical Education)
Postgraduate		
1975	M. D. Anderson Tumor Institute Houston, TX	Jr Medical Fellow, Surgery
1975-1976	Strong Memorial Hospital Rochester, NY	Intern/Resident, Surgery
1976-1977	Strong Memorial Hospital Rochester, NY	Assistant Resident, Surgery
1978-1980	National Cancer Institute Bethesda, MD	Staff Fellow, Surgery Branch
1980-1982	University of Rochester Rochester, NY	Sr. & Chief Resident, Surgery

2002	University of Pittsburgh Pittsburgh, PA	Mini-MBA Business Essentials for the Bio-Scientist
2002	ProteinChip University	Ciphergen ProteinChip Technology Protein Profiling Advnaced Course; July 26, 2002

APPOINTMENTS AND POSITIONS

Academic

1972	University of Muenster, Westphalen West Germany	Res. Asst. Physiologische Institut II
1975	Twelve Oaks Hospital Houston, TX	Emergency Room Physician
1980-1982	University of Rochester	Instructor in Surgery
1983-1988	Uniformed Services University Bethesda, MD	Assistant Professor of Health Sciences
1988-1990	Uniformed Services University Of the Health Sciences, Bethesda, MD	Associate Professor of Surgery
1990-Present	University of Pittsburgh Pittsburgh, PA	Professor of Surgery, Molecular Genetics and Biochemistry;
1990-2000		Chief, Section of Surgical Oncology; made a Division in 1998
1991-2000	Pittsburgh Genetics Institute Pittsburgh, PA	Codirector, Human Gene Therapy Program
1992-2000	Pittsburgh Cancer Institute Pittsburgh, PA	Codirector, Division of Biological Therapeutics
1995-Current	Pittsburgh Biotechnology, Inc	CEO and President
1999-2001	SmithKline Beecham Pharmaceuticals	Vice President and Director, Division of Inflammation, Tissue Repair & Oncology World Wide Discovery Biology; Research and Development
2001	GlaxoSmithKline Pharmaceuticals	Vice President and Director, High Throughput Biology; Discovery Research Biology; Research and Development

2002	Metacine, Incorporated	Chief Scientific Officer, Cofounder Sr. VP for Medical Affairs
2002	University of Pittsburgh Molecular Medicine Institute	Director, Translational Research
2002	University of Pittsburgh School of Engineering, Dept Bioengineering	Professor of Bioengineering

GOVERNMENT

1977-1978	National Health Service Corps Onamia, MN	Medical Officer
1982-1990	National Cancer Institute Bethesda, MD	Senior Investigator, Surgery Branch

CERTIFICATION AND LICENSURE

Speciality Certification

1983	American Board of Surgery	#29138 Surgery
1993	American Board of Surgery, Recertification	#29138 Surgery

MEDICAL OR OTHER PROFESSIONAL LICENSURE

1975	National Board of Medical Examiners	Diplomate
1976	New York	129152
1977	Minnesota	23584
1979	Maryland	D23864
1990	Pennsylvania	MD-042025-L

MEMBERSHIP IN PROFESSIONAL AND SCIENTIFIC SOCIETIES

American College of Surgeons, Fellow
American Medical Association
American Association of Cancer Research
- 1991 Program Committee

American Association of Immunology
- 1990,1992 Program Committee
- 1996/97 Comoderator Tumor Immunology Minisymposium
- 1997-2000 Tumor Immunology Block Cochair

American Society of Clinical Oncology
- 1996/97 Program Committee

American Surgical Association
Association for Academic Surgery
Cell Transplant Society
Central Surgical Association

Clinical Immunology Society
1993 Program Committee
2001, 2002 Federation of Clinical Immunology Societies, SBT Representative
Melanoma Research Foundation
1996-Present Board of Directors
Molecular Medicine Society
Society for Analytical Cytology
Society of Biologic Screening, 2001
Society of Surgical Oncology
1992,1993 Program Committee; 1993-1997 Clinical Affairs Committee
Society of University Surgeons
Society for Biologic Therapy
1991-1993 Program Committee
1994-Present Executive Council
1996-1998 Vice President and President Elect
1998-2000 President
Surgical Biology Club
World Association of Hepato-Pancreatico-Biliary Surgery

EDITORIAL BOARDS

1988 European Cytokine Journal
1990 J. Immunotherapy (Formerly J. Biological Response Modifiers, Assoc. Editor)
1990-1995 J. Immunology
1990-1994 Contemporary Oncology
1991 General Surgery & Laparoscopy News (Surgical Oncology)
1991 Melanoma Research
1993 Therapeutic Immunology
1993 Cancer Research, Therapy and Control
1994 Cancer Gene Therapy, Associate Editor
1995 Clinical Cancer Research (Associated with AACR)
1995 Natural Immunity
1995 The Cancer Journal, Associate Editor
1995 Gene Therapy (Nature)
1995 Cytokines and Molecular Therapy
1996 Human Gene Therapy
1997 Cancer Therapeutics
1999–2001 Clinical Immunology
2000Current Opinion in Investigational Drugs, Gene Therapy/Oncology Section Editor
2003 Journal Immunotherapy, Associate Editor

ACTIVITIES

1983-1990 Hospital Infection Control Committee, NIH

1984 Member, Source Evaluation Group RFP NCI CM 37613-64; "Phase I/II Clinical Evaluation of BRMs for the Treatment of Cancer"

1985-1990	Project Officer, Cell Sorting Operation, Surgery Branch, NCI
1985	FDA License Committee, Interferon Licensure in Melanoma
1985	Member, Source Evaluation Group RFP:NCI. CM 37613-64; MAO 4,5:Phase I Clinical Trial of Cytotoxic Activated Lymphocytes/IL-2
1985	Amer. Coll. Surgeons Rep.; CDC Task Force: Recom-mendations for Preventing Transmission of Infection with Human T-Lympho-trophic VirusType III-Lymphadenopathy-associated Virus During Normal Procedures.
1985-1987	Coordinator, NIH Melanoma Working Group
1985-1987	Review Board, United Cancer Council, Inc., Rochester, NY
1987	Chairperson, Minisymposium on In Vivo Effects of Cytokines; FASEB, Washington, D.C. 4/1/87
1987	Representative, NCI Melanoma Clinical Strategy Group
1988-1990	Surgery Br. Rep., NCI Investigational Review Board
1989	Cochairperson, Minisymposium on T-cells and the Treatment of Cancer, AACR, San Francisco, CA; 5/25/89
1990	Ad Hoc Reviewer, Experimental Immunology Study Section, NIH
1990	Cancer Group, National Disease Research Interchange; 9/17/90
1990	Surgical Forum Moderator (Tumor Immunology), American College of Surgeons; San Francisco, CA; 10/8/90.
1990	Chairman, Special Study Section, Experimental Immunology, NIH
1990	Cancer Vaccine Workshop, NCI; Bethesda, MD; 10/29/90
1991	Planning Committee, NIH Consensus Development Conference on the Diagnosis and Treatment of Early Melanoma
1991	Participant, NIH Training Grant, University of Pittsburgh, "Molecular Mechanisms and Therapy of Childhood Diseases"
1991	Chairperson, Minisymposium on Antitumor Effectors; FASEB,Washington DC; 4/22/91
1991	Society of Surgical Oncology/Program Committee/Research and Government

	Relations Committee
1992 - 1995	American Society of Clinical Oncology Young Investigator Award, Clinical Development Award Committee
1992	Search Committee, Chair UPMC Director Radiation Oncology
1992-1995	External Advisory Committee, "Immunity to Lung Tumors and Melanoma by Gene Transfer to Tumors and Tumor-specific CTL", University of Miami Cancer Institute, PI, Eckhard R. Podack, MD
1993	What's New in Surgical Oncology, Amer. College of Surgeons
1993	Search Committee, Breast Cancer Center Director, UPMC/PCI
1993-2000	Mellon/Dickson Prize Committee; University of Pittsburgh School of Medicine; Chair 1997-2000
1994	Search Committee, NSABP Chairman, UPMC
1994	External Advisory Committee, "Gene Therapy for Solid Tumors", Baylor College of Medicine, PI, Savio Woo, Ph.D.
1994-Present	Executive Council, Society for Biologic Therapy; Vice President (1996); President 1998-2000; Immediate Past President 2000-2002.
1995-1996	UICC/American Cancer Society Fellowship Committee
1996	External Advisory Committee, "Gene Therapy of Cancer", Memorial Sloan-Kettering Cancer Institute, PI, Lucio Luzzatto, MD
1997	Site Visit Committee, National Institutes of Health, National Cancer Institute; Frederick Cancer Research Center, Branch Chief, John Ortaldo.
1997	UPMC/Health Sciences International Committee
1997	Site Visit Committee, National Institutes of Health, National Cancer Institute; Section of Tumor Immunology, Branch Chief, Jeffrey Schlom.
1997	Site Visit Committee, National Institutes of Health, National Cancer Institute; 1 RO1 CA76489-01 Dr. Donald L. Morton Polyvalent Vaccine: Phase III Trial in Stage IV Melanoma; John Wayne Cancer Institute; August 5, 1997.
1997-2000	Cardinal Bernardin Cancer Center External Advisory Council (Loyola University Medical Center)
1997-2003	Melanoma Research Foundation, Board of Trustees

1998	TK Immunotherapy Expert Panel; Rhone Polenc Rorer
1998	Search Committee, Chief of Urology University of Pittsburgh
1998-2001	Ohio State University Scientific Advisory Committee; Arthur G. James Cancer hospital and Research Institute
1998	Biosafety Committee, Mercy Hospital (Adenoviral p53 Gene Therapy)
1998	Clinical Trials Steering Committee; University of Pittsburgh Medical Center
1998	Search Committee, Chief of Medicine University of Pittsburgh
1998	Standing Committee for Faculty Recognition and Research Awards, U. Pittsburgh
1997-2001	Peer Review Committee on Cliical Research, Cancer Control and Epidemiology; American Cancer Society
1999	Co-Director, Gene Therapy Program, SmithKline Beecham
1999	Co-Director, Protein Agent Strategic Initiative, SmithKline Beecham
1999-2000	Co-chair, Cancer Gene Therapy Committee of the American Society of Gene Therapy (ASGT)
2000	Sponsored, developed, and ran SB Symposium on "Tissue Repair and Wound Healing, Therapeutic Opportunities" Upper Providence, March 2-3, 2000.
2000	Grand Rounds, University of Pennsylvania Cancer Center; In Vivo Veritas – Lessons for Immunotherapy of Cancer; April 20, 2000.
2001	New York Academy of Sciences; Codirector; Symposium on Use of Viral Vectors for Target Validation with Tom Kost; December 4, 2001
2001	Study Section; Chemoprevention of tobacco-related cancers in former smokers: preclinical studies; RFA CA-02-008; December 6, 2001; Nov 4, 2002.
2002	American Society of Clinical Oncology Discussant; Annual Meeting, Orlando; Enhancing the antitumor effects of IL-2.
2002	Amer. Association for Gene Therapy; Meet the Professor Session – Immunology
2002	James Ewing Young Investigator Award for Clinical Research; Society of Surgical Oncology; Selection Committee
2002	External Advisor/ PI Savio Woo Mt. Sinai School of Medicine; Gene Therapy of

Colorectal Cancer

2002 Scientific Advisory Board, Association for Cancer Gene Therapy

2002 Guest Editor with Brigitte Autran, Hervé Fridman, and Bruce Walker. Special Issue – Vaccine [Volume 20 Supplement 4 19 December 2002]: Therapeutic Vaccines Against HIV and Cancers 23-26 June 2002, Les Pensières, Veyrier-du-Lac, Annecy, France; Organized by the Merieux Foundation with the support of Aventis Pasteur and Mérial

2003 External Advisor/PI Thomas Kupper Harvard Medical School; NCI funded Melanoma SPORE

2003 Coorganizer with Michael Atkins and Laurence Zitvogel: FOCiS-iSBTc Satellite Symposium on Cellular Immunology and the Immunotherapy of Cancer V Thursday Afternoon May 15th, 2003

2003 Coorganizer 1st International Society of Biological Therapy Workshop on Proteomics, Genomics and High Content Cellular Screening in Patients with Cancer with Ena Wang, MD, PhD Dept. of Transfusion Medicine, National Institutes of Health; Nabil Hanna, PhD, Chief Scientific Officer, IDEC Pharmaceuticals Masur Auditorium, National Institutes of Health; October 30, 2003;

Honors

1971-1974 Honors Program in Medical Education

1982 Robert H. White Award for Excellence in Teaching, Univ. of Rochester

1986 Edith Hamilton Cancer Lecturer, Genesee Hospital/Wasyl Pluta Cancer Center, Rochester, NY

1987 Special Achievement Award; Dept. Health & Human Services, NIH.

1988 4th Vender Lecturer, Northwestern University; Evanston, Illinois

1989 Visiting Professor, Dept. of Surgery, Duke University; Durham, NC

1990 Coorganizer Keystone Symposium on Cellular Immunity and the Immunotherapy of Cancer, Park City, UT

1990 Virginia Mason Res. Center Distinquished Lecturer, Seattle WA

1990 14th Annual Lecturer, Internal Medicine Group; New Orleans, LA.

1991	Annual John Palmer Lecturer, Univ. of Toronto; Toronto, Ontario
1991	Tenth Hinshaw Lecturer, Univ. of Rochester, Rochester, New York
1992	Coorg. Keystone Symp.on Melanoma and Biology of the Neural Crest, Taos, NM
1992	Coorganizer, Roundtable Roussel-UCLAF on Cytokines and Cancer, Versailles, France, 10/7-9/92
1992	Chairman, Cancer Care Committee, Pittsburgh Cancer Institute
1993	Organizer, Symposium Molecules to Medicine, 2nd Inter. Congress on Biol. Response Modifiers; San Diego, CA; 1/29/93
1993	Coorganizer Keystone Symposium on Cellular Immunity and the Immunotherapy of Cancer II, Taos, NM; 3/17-24/93.
1993	Cochairman, Symp.Tumor Immunology, Denver CO; AAI/CIS 5/29/93.
1993	Visiting Professor of Surgical Oncology; Academia Sinica/Veteran's General Hospital; Taipei, Taiwan; 6/27/93-7/15/93.
1994	NIH Committee (Mail Ballot-Scientific Meetings and Conferences).
1994	Sommer Memorial Lecture, Portland, Oregon; April 21-22, 1994.
1994	Site Visit Chairman, NIH PO1-CA64254-01. Brain Tumor Gene Therapy; June 14-16, 1994
1994	Plenary Speaker, Centennial Celebration of the Royal Victoria Hospital; June 9, 1994
1995	EJ Tabah Lectureship, McGill University; March 13-15, 1995.
1995	First Peter Finke Lecturer; Memorial Sloan Kettering; Sept. 15, 1995.
1995	Coorganizer, New York Academy of Sciences Symposium: Interleukin 12; An important regulatory cytokine. November 9-12, 1995; NYC.
1996	Reverse Site Visit Committee Stanford University Medical Center General Clinical Research Center; July 30, 1996; Rockville, MD.
1996	Site Visit Committee; Laboratory of Experimental Immunology; Div. of Basic Sciences; NCI; Frederick, MD; November 5, 1996.
1996	McCutcheon Lectureship, University of Toronto; November 8, 1996.

1997	Distinguished Lecturer, Robert Wood Johnson UMDNJ; January 15, 1997.
1997	Coorganizer, Keystone Symposium on Cellular Immunology and the Immunotherapy of Cancer; Copper Mountain, February 1-7, 1997.
1997	Distinguished Lecturer, Westmoreland Hospital; Greensberg, PA
1997	University of Pittsburgh Cancer Institute Scientific Leadership Award
1998	Coorganizer, 5th International DC Meeting; Pittsburgh; September 24-28, 1998.
1998	Coorganizer, 13th Society for Biological Therapy Meeting, Pittsburgh; October 21-21, 1998.
1998-2001	Visiting Professor of Oncology, Shanghai Medical University (SMU)
2000	Co-Organizer, 4th Keystone Symposium on Cellular Immunology and the Immunotherapy of Cancer; Santa Fe, NM January 21-27, 2000
2000	Keynote Speaker, American Association of Cancer Research Special Meeting on Melanoma; The Woodlands, Texas May 3-7, 2000.
2000	Coorganizer, American Association of Cancer Research Special Meeting on Cytokines; Vail Colorado; September 20-23, 2000.
2000	Visiting Professor; Wistar Instititute; Philadelphia, PA; April 28, 2000.
2001	Plenary Lecture, Japanese Surgical Society, April 2001
2002	Danny Hill Tumor Immunology Lectureship, University of Western Australia, Perth, Australia
2002	Surgical Grand Rounds, Columbia University August 29, 2002.
2002	Surgical Grand Rounds, Montefiore Hospital/Albert Einstein University; October 21, 2002.
2003	Surgical Forum; Plenary Speaker Society Surgical Oncology; March 10, 2002. Los Angeles, CA

RESEARCH GRANTS

9/92-10/96	NIH 1UO1 CA 58272-01 "Locoregional ALT with autologous IL-2, activated NK cells", Principal Investigator, $800,000.
9/92-10/94	NIH 1PO1 CA59371-01 "Gene Therapy of Cancer - Immunological Approaches", Principal Investigator, $750,000.
9/92-8/94	NIH 1ROA CA56088-01A1 "Specific T-cell Recognition of Human Melanoma", Principal Investigator, $100,000.
8/93-9/97	NIH 1RO1 CA 57804-01A1 "Identification of Class I Presented Peptides", Co-Principal Investigator, $466,808.
10/91-10/93	VA RAG "Breaking Tolerance with Cytokine Based Cancer Immunotherapy", Coinvestigator, $68,000.
1995-1998	Schering Plough Research Institute. "Gene Therapy with IL-4, IL-10, vIL-10, and interferon alpha", Principal Investigator, $1,000,000.
4/96-5/01	NIH (1RO1CA63350-01) "Dendritic Cell Based Therapies Designed for Murine Tumors", Co-Principal Investigator, $1,060,434.
2/94-3/99	NIH (NCI-CM-47001-64) "Clinical Trials of Biologic Response Modifiers", Principal Investigator, $2,874,341.
4/94-3/96	NIH (NCI-1R21CA69106-01) "Emulsion Based Therapy of Cancer", Coinvestigator, $96,000.
7/95-6/99	NIH (NCI-1P01 CA 68067-01) "Cytokine Gene Therapy of Cancer", Principal Investigator, $4,261,226.
11/95	NIH (1 R13 CA68006-01) "Interleukin 12: Immunology of a Regulatory Cytokine",Principal Investigator, $47,900.
10/96	NIH 1PO1 DE12321. "Vaccine Development for Head and Neck Cancer," Principal Investigator, Project 3. PI Dr. Theresa Whiteside, $2,500,000.
8/96-6/00	NIH NCI 1UO1CA74329-01. "Clinical Trials of Biological Response Modifiers. Principal Investigator, $550.951.
02/97	NIH 1R13CA73576-01. "Conference on Cellular Immunology of Cancer," Principal Investigator, $50,000.
04/97-03/02	NIH NCI-1RO1CA73816-01."Dendritic cells elicit effective antitumor responses," Coinvestigator (PI, Walter J. Storkus), $1,429,008.

7/97-6/02	NIH NCI 1PO1DE12321-01. "Vaccine Development for Oral Carcinoma." Principal Investigator, Project 1. PI Dr. Theresa Whiteside, $2,600,000
11/97	NIH NCI-1PO1CA73743-01. "DC Biology and Therapy", CoPI, $9,978,000.
11/97	NCI-1K12CA76906-01. "Biologic Therapy Research Career Development Program." Co Principal Investigator, $1,660,371.
1998	Argonex, Inc. "Identification of T-cell targets in colorectal and ovarian carcinoma." Principal Investigator, $137,952.
01/98-12/02	NIH NCI 1PO1CA7374301A1 "Dendritic Cell Biology and Therapy. Principal Investigator, $9,021,156.
09/98-09/02	PAR-97-080 "Novel HIV Therapies: Integrated Preclinical/Clinical Program"; Project 4: Dendritic Cell Therapy for HIV: Role of Cytokines on Enhanced T-cell Function"; Total $1,380,101; PI Michael Lotze, CoPI Cara Wilson.
06/01/99-05/30/04	"Research Training in AIDS, STDs and Emerging Infections;" PI David Tweardy; Total $747,573; Mentor/Training Faculty
03/00-02/05	NIH NCI 1RO1CA82016-01A29 "Melanoma Associated T & DC Dysfunction and Death. Principal Investigator, $1,676,406.
04/00-03/05	NIH NCI 2PO1CA68067 Cytokine Gene Therapy of Cancer, CoPI, $9,861.090
10/01/02	Submitted to the NCI; "Integrating NK and DC into Cancer Care"; 5 projects; 5 cores; Principal Investigator, CoPI, Ronald Herberman; $19,811,383.

PATENTS

Storkus Walter, Michael T. Lotze. Rapid Isolation of T-cells Epitopes from viable cells by mild acid elusion. (November 23, 1999; 5,989,565)

Baar Joseph, Michael T. Lotze. Interferon/gamma inducible cytokine expression plasmids.

Tahara Hideaki, Michael T. Lotze. In situ injection of antigen-presenting cells with genetically enhanced cytokine expression. U Pittsburgh Reference Number 181; 09/395,836. Filed September 14, 1999; issued August 6, 2002.

Thomson Angus, Lu Lina, Michael T. Lotze - "Genetic engineering of dendritic cells for immunosuppressive therapy" Disclosure

Tahara Hideaki, Michael T. Lotze. Modified interferon gamma inducing factor (IGIF/IL-18) sequence which can be secreted as an active form IL-18 protein from mammalian cells.

Angus W. Thomson, Lina Liu, Michael T. Lotze. Genetically Modified Antigen Presenting Cells for the Induction of Immunointolerance.

Siamak Agha-Mohammadi, Michael T. Lotze. PCT/US01/31138. High Efficiency-Regulatable Expression System

FILMS

1986 Demonstration of intraoperative ultrasound imaging, CO_2 laser surgery and CUSA ultrasonic dissection for a right hepatic lobectomy for hepatoma; Spectacular Problems in Surgery, ACS

1992 Immunotherapy Video Handbook, Proleukin^R

1995 Resection of a Giant Lipoma; ACS Cine Forum, New Orleans, October 22-27, 1995.

BOOKS

1990 Cellular Immunity and the Immunotherapy of Cancer, Ed. Lotze MT, Finn OJ, Wiley-Liss; New York, 1990.

1994 Current Cancer Therapy, Ed. Kirkwood JM, Lotze MT, and Yasko J; 1998 Current
1996 Science, Philadelphia, 1994; 2nd Edition 1996; 3rd Edition 1998; 4th Edition 2001.
1998
2001

1996 Interleukin 12: Cellular and Molecular Immunology of an Important Regulatory Cytokine. Ed. Michael T. Lotze, New York Academy of Sciences, NY.

1997 Regional Therapy of Advanced Cancer, Ed. Lotze MT, Rubin JT; JB Lippincott, Philadelphia, 1997.

1999 Dendritic Cells: Biology and Clinical Applications; Ed. Michael T. Lotze, Angus W.
2001 Thomson; Academic Press; London; 2nd Edition 2001

2002 Tumor Immunology: Molecularly Defined Antigens and Clinical Applications. Ed. Giorgio Parmiani and Michael T. Lotze; Taylor and Francis, London; 2002.

2003 Cytokine Handbook, 4th Edition. Ed. Angus W. Thomson, Michael T. Lotze; Academic Press, London; expected Spring 2003.

2004 Measuring Immunity, 1st Edition. Ed. Michael T. Lotze, Angus W. Thomson; Academic Press, London, expected Fall 2004.

SCIENTIFIC ADVISORY BOARDS

1990-1994 Cellco, Inc. Rockville, MD; Hollow-fiber growth of cells

1995-1998 Canji, Inc; Subsidiary of Schering Plough, Inc. Gene Therapy [p53, RB, cytokines]

2002-current Immunodesigned Molecules, Inc. Parisian company involved with cell/DC therapy

2002-current Tissue Informatics, Inc. Pittsburgh company involved with machine vision tissues

2002-current CureTech, Inc. Tel Aviv company involved with developing antibody therapies

2002 BioMeasure; Boston; consultant on therapeutic vaccines for cancer

2003 MediGene, Munich; consultant on therapeutic vaccines for cancer

BIBLIOGRAPHY

1. Lotze, M.T., Strausser, J.L., Rosenberg, S.A. In vitro growth of cytotoxic human lymphocytes. II. Use of T cell growth factor (TCGF) to clone human T cells. J. Immunol. 124:2972-2978, 1980.

2. Dubois, M., Lotze, M.T., Diamond, W.J., Kim, Y.O., Flye, W.M., Macnamara, T.E. Pulmonary shunting during leukagglutinin induced noncardiac pulmonary edema. JAMA 244:2186-9, 1980.

3. Lotze, M.T., Lines, B.T., Strausser, J.L., Rosenberg, S.A. Tumor lysis by human T lymphocytes in long term culture and their distribution in vivo: Implications for immunotherapy. Surg. Forum 31:404-406, 1980.

4. Lotze, M.T., Lines, B.T., Mathisen, D.J., Rosenberg, S.A.: The in vivo distribution of cultured autologous human and murine lymphoid cells grown in T cell growth factor (TCGF): Implications for the adoptive immunotherapy of tumors. J. Immunol. 125:2972-2978, 1980.

5. Bias, W.B., Hsu, S., Pollard, M.K., Harvey, J., Lotze, M.T., Arnett, F.C., Stevens, M.B.: HLA-DR characterization of a Chippewa Indian subpopulation with high prevalence of rheumatoid arthritis. Human Immunol. 2:155-163, 1981.

6. Lotze, M.T., Rosenberg, S.A.: In vitro growth of cytotoxic human lymphocytes. III. The preparation of lectin free T cell growth factor (TCGF) and an analysis of its activity. J. Immunol. 126:2215-2220, 1981.

7. Lotze, M.T., Grimm, E.A., Mazumder, A., Strausser, J.L., Rosenberg, S.A.: Lysis of fresh and cultured autologous tumor by lymphocytes cultured in T cell growth factor (TCGF). Cancer Res. 41:4420-4425, 1981.

8. Lotze, M.T., Duncan, M.A., Gerber, L.H., Woltering, E.A., Rosenberg, S.A.: Early versus delayed motion following axillary dissection: A randomized, prospective study. Ann. Surg. 193: 288-295, 1981.

9. Harvey, J., Lotze, M.T., Stevens, M.B.: Rheumatoid arthritis in a Chippewa band. I. Pilot screening study of disease prevalence. Arth. Rheum., 24: 717-721, 1981.

10. Strausser, J.L., Mazumder, A., Grimm, E.A., Lotze, M.T., Rosenberg, S.A.: Lysis of human solid tumors by autologous cells sensitized *in vitro* to alloantigens. J. Immunol. 127: 266-271, 1981.

11. Rosenberg, S.A., Grimm, E.A., Lotze, M.T., Mazumder, A.:The growth of human lymphocytes in T-cell growth factor: Potential applications to tumor immunotherapy. Lymphokines. Mizel, S.F. (ed), Academic Press: New York, 1982.

12. Rosenberg, S.A., Eberlein, T.J., Grimm, E.A., Lotze, M.T., Mazumder, A., Rosenstein, M.: Development of long-term cell lines and lymphoid clones reactive against murine and human tumors: A new approach to the adoptive immunotherapy of cancer. Surgery 92:328-335, 1982.

13. Harvey, J., Lotze, M.T., Bias, W.B., Hsu, S., Arnett, F.C., Stevens, M.B.: Rheumatoid arthritis in a Chippewa band. II. Field study with clinical, serologic and HLA-D correlations. J. Rheumatology. 10:28-32, 1983.

14. Lotze, M.T., Marquis, D.M., Carey, A.S., Byer, B.J., Hoy, W.E., May, A.G.: Two new assays for the early detection of transplant rejection, Interleukin-2 response and PHA-augmented NK activity. Transplantation Proceedings 15:1796-1799, 1983.

15. Duncan, M.A., Lotze, M.T., Gerber, L., Rosenberg, S.A.: Incidence and recovery of serratus anterior palsy following axillary dissection. J Amer. Phys. Ther. Assn. 63:1243-1247, 1983.

16. Ouriel, K., Lotze, M.T., Hinshaw, J.R.: Prognostic factors of carcinoma of the male breast. Surg. Gynec. Obst. 159:373-376, 1984.

17. Donohue, J.H., Rosenstein, M., Chang, A.E., Lotze, M.T., Robb, R.J., Rosenberg, S.A.: The systemic administration of purified Interleukin-2 enhances the ability of sensitized murine lymphocyte lines to cure a disseminated syngeneic lymphoma. J. Immunol. 132:2123-2128, 1984.

18. Grimm, E.A., Vose, B.M., Chu, E.W., Wilson, D.J., Lotze, M.T., Rayner, A.A., Rosenberg, S.A.: The human mixed lymphocyte tumor cell interaction test I. Positive autologous lymphocyte proliferative responses can be stimulated by tumor cells as well as by cells from normal tissues. Cancer Immunol. & Immunotherapy 17:83-89, 1984.

19. Donohue, J.H., Lotze, M.T., Robb, R.J., Rosenstein, M., Braziel, R.M., Jaffe, E.S., Rosenberg, S.A.: In vivo administration of purified Jurkat derived Interleukin-2 in mice. Cancer Research 44:1380-1386, 1984.

20. Rosenberg SA, Rosenstein M, Grimm E, Lotze, M, Mazumder A. The use of lymphoid cells expanded in IL-2 for the adoptive immunotherapy of murine and human tumors.In Thymic Hormones and Lymphokines. Goldstein A.L.; Plenum Pub. Co., NY, 1984;pgs. 191-207.

21. Chang AE, Lotze MT, Ames RS, Rosenberg SA. A large scale method for the purification of Interleukin-2 secreted by the murine EL-4 thymoma. J. Immunopharmacology 7:17-31, 1985.

22. Lotze, M.T., Robb, R.J., Frana, L.W., Seipp, C.A., Sharrow, S.O., Gelman, E.T., Longo, D.L., Rosenberg, S.A.: Clinical studies with purified human IL-2 in patients with the acquired immunodeficiency syndrome and cancer in UCLA Symposium:AIDS; Alan R. Liss, Inc. Press, NY, 1984; J. Groopman, M. Gottlieb.

23. Lotze MT, Rosenberg S. In vivo use of cytokines.Clin. Immun. Newsletter, 5:116-120, 1984.

24. Lotze, M.T., Robb, R.J., Sharrow, S.O., Frana, L.W., Rosenberg, S.A.: Systemic administration of interleukin-2 in man. J. Biol. Resp. Mod. 1984, 3:475-482, 1984.

25. Lotze, M.T., Rosenberg, S.A.: Immunologic changes in patients with cancer given interleukin-2 (IL-2) in a phase I trial. Surg. Forum, 1984, 35:407-408, 1984.

26. Rayner, A.A., Grimm, E.A., Lotze, M.T., Rosenberg, S.A.: Demonstration of shared recognition and lysis of autologous and allogeneic fresh human tumors by cloned lymphokine activated killer (LAK) cells. Surg. Forum, 1984, 35: 415-417.

27. Lotze, M.T., Sugarbaker, P.H.: Femoral artery based myocutaneous flap for hemipelvectomy closure; Amputation following failed limb-sparing surgery and radiation therapy. Am. J. Surg. 150: 625-630, 1985.

28. Rayner, AA, Grimm, EA, Lotze, MT, Wilson, DJ, Rosenberg, SA: Lymphokine-activated killer (LAK) cell phenomenon:IV. Lysis by LAK cell clones of fresh human tumors from autologous and multiple allogeneic tumors. JNCI 75:67-75, 1985.

29. Rayner, A.A., Grimm, E.A., Lotze, M.T., Chu, E.W., Rosenberg, S.A.: Lymphokine activated killer (LAK) cells. Analysis of factors relevant to the immunotherapy of human cancer. Cancer 55:1327-1333, 1985.

30. Lotze MT, Frana LW, Sharrow SO, Robb RJ, Rosenberg SA. In vivo administration of purified human IL-2 I.Half life and immunologic effects of the Jurkat cell line derived Interleukin 2. J. Immunol. 134:157-166, 1985.

31. Lotze, M.T., Rosenberg, S.A.: Treatment of tumor patients with purified human interleukin-2. (In) Cellular and Molecular Biology of Lymphokines. Academic Press, 1985, pp. 711-721.

32. Lotze, M.T.: Current and future research directions in management of hepatic cancer in Hepatoma, ed. H. Wanebo, Marcel Decker, NY, 1986, pp. 501-534.

33. Lotze, M.T., Rayner, A.A., Grimm, E.A.: Problems with the isolation of lymphoid clones with reactivity to human tumors. Behring Institute Research Communications., 1985, 77:105-14.

34. Longo, D.L., Steis, R.G. , Lane, H.C., Lotze, M.T., Rosenberg, S.A., Preble, O., Masur, H., Rook, A.H., Fauci, A.S., Jacob, J., Gelmann, E.P.: Malignancies in the AIDS patient: Natural history, treatment strategies, and preliminary results. Ann. N.Y. Acad Science, 837:421-430, 1984.

35. Lotze, M.T., Rosenberg, S.A.: Treatment of immunologic disorders in AIDS patients. In Devita VT, Hellman S, Rosenberg SA (eds): Acquired Immune Deficiency Syndrome. Philadelphia, J.B. Lippincott, 1985: pp. 235-264.

36. Lotze, M.T., Matory, Y.L., Ettinghausen, S.E., Rayner, A.A., Sharrow, S.O., Seipp, C.A.Y., Custer, M.C., Rosenberg, S.A.: In vivo administration of purified human interleukin-2. II. Half life, immunologic effects and expansion of peripheral lymphoid cells in vivo with recombinant interleukin-2. J. Immunol. 135:2865-2875, 1985.

37. Lotze, M.T., Matory, Y.L., Rayner, A.A., Ettinghausen, S.E., Seipp, C.A., Rosenberg, S.A.: Toxicity of interleukin-2 in patients with cancer. Cancer. 58:2764-2772. 1986.

38. Skibber, J.M., Lotze, M.T., Garra, B., Fauci, A.: Successful management of hepatic abscesses by percutaneous catheter drainage in chronic granulomatous disease. Surgery. 99:626-630, 1986.

39. Lotze, M.T.: Stemming Cancer in the 80's. AIDS: A surgeon's responsibility. Bulletin of the American College of Surgeons. 70:6-12, 1985.

40. Edington, H., Lotze, M.T.: V-Y closure in abdominal wall stoma reduction. Surgery, Gynecology, and Obstetrics. 164:381-382, 1987.

41. Lotze, M.T., Custer, M.C., Sharrow, S.O., Rubin, L.A., Nelson, D.L., Rosenberg, S.A.: In vivo administration of purified human interleukin-2. III. Development of Tac positive cells and circulating soluble interleukin-2 receptors following interleukin-2 administration to humans. Cancer Res. 47:2188-2195, 1987.

42. Rosenberg, S.A., Lotze, M.T.: Cancer immunotherapy using interleukin-2 and interleukin-2-activated lymphocytes. Ann. Rev. Immunol. 4:681-709, 1986.

43. Rosenberg, S.A., Lotze, M.T., Muul, L.M., Leitman, S., Chang, A.E., Ettinghausen, S.E., Matory, Y.L., Skibber, J.M., Shiloni, E., Vetto, J.T., Seipp, C.A., Simpson, C., Reichert, C.M.: Observations on the systemic administration of autologous lymphokine activated killer cells and recombinant interleukin-2 to patients with metastatic cancer. NEJM. 313:1485-1492, 1985.

44. Perez, P., Titus, J.A., Lotze, M.T., Cuttita, F., Longo, D.L., Groves, E.S., Rabin, H., Durda, P.J., Segal,D.M.: Specific lysis of human tumor cells by T cells coated with anti-T3 crosslinked to anti-tumor antibody. J. Immunol. 137:2069-2072, 1986.

45. Rosenberg, S.A., Lotze, M.T., Muul, L.M., Leitman, S., Chang, A.E., Vetto, J.T., Seipp, C.A., Simpson, C.A.: A new approach to the therapy of cancer based on the systemic administration of autologous lymphokine activated killer cells and recombinant interleukin-2. Surgery 100:261-71, 1986.

46. Lotze, M.T., Chang, A.E., Seipp, C.A., Simpson, C., Vetto, J.T., Rosenberg, S.A.: High dose recombinant interleukin-2 in the treatment of patients with disseminated cancer: Responses, treatment related morbidity and histologic findings. JAMA. 256: 3117-3124, 1986.

47. Lotze, M.T., Rosenberg, S.A.: Results of clinical trials with the administration of interleukin-2 and adoptive immunotherapy with activated cells in patients with cancer. Immunobiology. 172: 420-437, 1986.

48. Lotze, M.T., Rosenberg, S.A.: Protocol design for lymphokine testing in clinical studies of human cancer. Lymphokine Res. 5: S177-S182, 1986.

49. Lotze, M.T, Custer, M.C., Rosenberg, S.A.: Intraperitoneal administration of interleukin-2 in patients with cancer. Arch. Surg. 121: 1373-1379, 1986.

50. Lotze, M.T.: Surgical considerations in the diagnosis and management of AIDS. AIDS Research. 2:141-148, 1986. (Reprint of 39)

51. Vetto, J.T., Papa, M.Z., Lotze, M.T., Chang, A.E., Rosenberg, S.A.: Reduction of toxicity of interleukin-2 and lymphokine activated killer cells in humans by the administration of corticosteroid. J. Clin. Oncol. 5:496-503, 1987.

52. Lotze, M.T., Carrasquillo, J.A., Weinstein J.N., Bryant, G.J., Perentesis, P., Reynolds, J.C., Matis, L.A., Eger, R.R., Keenan, A.M., Hellstrom, I.,Hellstrom, K-E,Larson,S.M.:Monoclonal antibody imaging of human melanoma: Radio-immunodetection by subcutaneous or systemic injection.Ann. Surg. 204:223-35, 1986.

53. Skibber, J.M., Lotze, M.T., Seipp, C.A., Salcido, R., Rosenberg, S.A.: Limb sparing surgery for soft tissue sarcomas: Analysis of wound related morbidity. Surgery 102:447-452, 1987.

54. Roberts, K., Lotze, M.T., Rosenberg, S.A.: The lymphokine activated killer cell. Separation and functional studies of the human precursor and effector cell. Cancer Res. 47:4366-4371, 1987.

55. Lotze, M.T.: The role of lymph node dissection in the treatment of metastatic cancer to regional lymph nodes. (In): Surgical Cure of Metastatic Cancer. Rosenberg, S.A. (ed), J.B. Lippincott Co., Philadelphia, 1987.

56. Skibber, J.M., Lotze, M.T., Muul, L.M., Uppenkamp, I.K., Ross, W., Rosenberg, S.A.: Human lymphokine-activated killer cells: Further isolation and characterization of the precursor and effector cell. Nat. Immunity and Cell Growth Reg. 6:291-305, 1987.

57. Cohen, P.J., Lotze, M.T., Roberts, J.R., Rosenberg, S.A., Jaffee, E.S.: The immunopathology of sequential tumor biopsies in patients treated with interleukin-2. Correlation of response with T cell infiltration and HLA-DR expression. Amer. J. Pathol. 129:208-216, 1987.

58. Lee, R.E., Lotze, M.T., Skibber, J.M., Tucker, E., Bonow, R.O., Ognibene, F.P., Carrasquillo, J.A., Shelhammer, J.H., Parrillo, J.E., Rosenberg, S.A.: Cardiorespiratory effects of immunotherapy with interleukin-2. J. Clin. Oncol., 7:7-20, 1989.

59. Gaspari, A., Lotze, M.T., Rosenberg, S.A., Stern, J.B., Katz, S.I.: Cutaneous changes associated with interleukin-2 administration; Development of erythro-derma and cutaneous lymphocytic infiltration. J. Amer. Med. Association. 258:1624-1629, 1987.

60. Roberts, K., Lotze, M.T.: Interleukin-2 promotion of conjugate formation by purified LAK precursors and T lymphocytes: Enumeration of cell conjugates by flow cytometry. J. Biol. Resp. Mod. 7:249-266, 1988.

61. Lotze, M.T., Roberts, K., Custer, M.C., Segal, D.A., Rosenberg, S.A.: Specific binding and lysis of human melanoma by IL-2 activated cells coated with anti-T3 and Anti-Fc receptor crosslinked to anti-melanoma antibody: A possible approach to the immunotherapy of human tumors. J. Surg. Res. 42:580-589, 1987.

62. Skibber, J.M., Lotze, M.T., Uppenkamp, I., Ross, W., Rosenberg, S.A.: Identification and expansion of human lymphokine activated killer cells: Implications for the immunotherapy of cancer. J. Surg. Res. 42:613-621, 1987.

63. Lotze, M.T., Custer, M.C., Rosenberg, S.A.: Interleukin 2 (IL-2) administration to humans results in the rapid emigration of a specific lymphocyte subset ($CD2^+$, 3-, 11^+, 16^+) from the peripheral blood. Unpublished.

64. Denicoff, K.D., Rubinow, D.R., Papa, M.Z., Simpson, C., Seipp, C.A., Lotze, M.T., Chang, A.E., Rosenstein, D., Rosenberg, S.A.: The neuropsychiatric effects of IL-2/lymphokine activated killer cell treatment. Ann. Int. Med. 107:293-300, 1987.

65. Rosenberg, S.A., Lotze, M.T., Muul, L.M., Chang, A.E., Avis, F.P., Leitmann, S., Linehan, W.M., Robertson, C.N., Lee, R.E., Rubin, J.T., Seipp, C.A., Simpson, C.G., White, D.E.: Clinical experience with the treatment of 157 patients with advanced cancer using lymphokine activated killer cells and interleukin 2 or high dose interleukin-2 alone. NEJM, 316:889-905, 1987.

66. Lotze, M.T.: Biology of IL-2 and rationale for its clinical application. In Rosenberg, S.A., moderator. New approaches to the immunotherapy of cancer. Ann. Int. Med. 108:853-864, 1988.

67. Lotze, M.T. Treatment of hepatocellular carcinoma. In Dibisceglie, A.M., moderator. Hepatocellular carcinoma. Ann. Int. Med. 108:390-401, 1988.

68. Lotze, M.T., Rosenberg, S.A. Interleukin-2 as a pharmacologic reagent. Lymphokines, Ed.: Kendall Smith, Academic Press; NY, NY. 1988, pp237-294.

69. Rizzoni, W.E., Miller, K., Rick, M., Lotze, M.T. Heparin induced thrombocytopenia and thromboembolism in the perioperative period. Surgery 103: 470-476, 1988.

70. Cotran R., Pober JS, Gimbrone, Jr. M, Springer TA, Wiebke EA, Gaspari AA, Rosenberg SA, Lotze MT. Endothelial activation during interleukin-2 immunotherapy: A possible mechanism for the vascular leak syndrome. J. Immunol. 139:1883-88,1987.

71. Lotze, M.T., Rosenberg, S.A. Interleukin 2 therapy for disseminated cancer (letter to editor). JAMA 257:1729-1731. 1987.

72. Lee, R.E., Gaspari, A.A., Lotze, M.T., Chang, A.E., Rosenberg, S.A. Effects of interleukin-2 on psoriasis. Arch. Derm., 124:1811-1815, 1988.

73. Wiebke, E.A., Lotze, M.T., Rosenberg, S.A. Tumor cell susceptibility to lysis: Marked increase in lysis by tumor infiltrating lymphocytes following target stimulation with interferon-ã and tumor necrosis factor -ã. Implications for immunotherapy. Surgical Forum. 38:436-438, 1987.

74. Weinstein, J.N., Black, D.V., Holton, O.D. III, Covell, D.G., Parker, R.J., Mulshine, J.L., Lotze, M.T., Carrasquillo, J., Eger, R., Lewis, A., Larson, S.A., Keenan, A.M. Delivery of monoclonal antibodies to lymph nodes via the lymphatics. In: The Pharmacology and Toxicology of Proteins, Winkelhade, J.L., Holcenberg, J.S., Eds., NY: Alan R. Liss. 1988.

75. Lotze, M.T., Rosenberg, S.A. The Immunologic Treatment of Cancer. Ca-A Cancer Journal for Clinicians. 38:68-94, 1988.

76. Lotze, M.T., Ross, W.G., Tomita, S., Custer, M.C. Cells invading tumors: Strategies for the identification and expansion of tumor reactive lymphocytes. Transplantation Proceedings. 20:326-331, 1988.

77. Skibber, J.M,., Matter, G.J., Pizzo, P.A., Lotze, M.T. Right lower quadrant pain in young patients with leukemia: A surgical perspective. Ann. Surg, 206:711-716, 1987.

78. Wiebke, E.A., Rosenberg, S.A., Lotze, M.T. Cytokines alter target cell susceptibility to lysis: I. Evaluation of non-MHC restricted effectors reveals differential effects on natural and lymphokine-activated killing. J.Biol.Response Modifiers 9:113-126, 1990.

79. Jablons, D.M., Lotze, M.T. Derivation of cells with lytic activity against fresh and cultured tumors from human bone marrow. J. Surg. Res. 44:404-416, 1988.

80. Wiebke, E.A., Rosenberg, S.A., Lotze, M.T.: Acute immunologic effects of IL-2 in cancer patients: Decreased delayed type hypersensitivity response and decreased proliferative response to soluble antigens. J. Clin. Oncol. 6:1440-9, 1988.

81. Chang AE, Kinsella T, Glatstein E, Baker AR, Sindelar WF, Lotze MT, Danforth Jr. DN, Sugarbaker PH, Lack EE, Steinberg SM, White DE, Rosenberg SA. Adjuvant chemotherapy is effective for patients with high grade extremity sarcomas: Extended follow-up on treated patients. J. Clin. Oncol. 6:1491-1500, 1988.

82. Topalian, S.L., Solomon, D., Avis, F.P., Chang, A.E., Freerksen, D.L., Linehan, W.M., Lotze, M.T., Robertson, C.N., Seipp, C.A., Simon, P., Simpson, C.G., Rosenberg, S.A.: Immunotherapy of patients with advanced cancer using tumor infiltrating lymphocytes and recombinant interleukin-2: A pilot study. J. Clin. Oncol. 6:839-853, 1988.

83. Lotze, M.T.: Surgical management of hepatocellular carcinoma. Gastroenterology Clin. of N.A. 16:613-626, 1987.

84. Lotze, M.T., Tomita, S., Rosenberg, S.A.: Human tumor antigens defined by cytotoxic and proliferative T cells. In: Human Tumor Antigens and Specific Tumor Therapy. Eds. R. Metzgar and M.M Mitchell, 1988.

85. Lotze, M.T.: Book Review: "A history of surgery with emphasis on the Netherlands." By: D. De Moulin. Ann. Int. Med., 109:86-87, 1988.

86. Rosenberg, S.A., Longo, D.L, Lotze, M.T.: Principles of Biologic Therapy. In: Principles and Practices of Oncology. Eds. DeVita, V., Hellman, S., and Rosenberg, S.A. Lippincott, Philadelphia, 1989. pp. 301-348.

87. Del Vecchio, S., Reynolds, J.C., Carrasquillo, J.A., Blasberg, R.G., Neumann, R., Lotze, M.T., Bryant, G.J., Farkas, R.J., Larson, S.M.: Local distribution and concentration of ^{131}I-9.2.27 monoclonal antibody in malignant melanoma following intravenous injection. Cancer Res. 49:2783-2789, 1989.

88. Begley, M.G., Shawker, T.H., Robertson, C.N., Wei, J., Bock, S., Lotze, M.T.: Fournier's gangrene: Diagnosis by scrotal ultrasound examination. Radiology. 169:387-389, 1988.

89. Schwartzentruber, D., Lotze, M.T., Rosenberg, S.A.: Colonic perforation: An unusual complication of therapy with high-dose IL-2. Cancer. 62:2350-2353, 1988.

90. Jablons, D.M., Mule, J.J., McIntosh, J.K., Sehgal, P.B., May, L.T., Huang, C.M., Rosenberg, S.A., Lotze, M.T.: Interleukin-6/Interferon â-2 as a circulating hormone: Induction by cytokine administration in humans. J. Immunol., 142:1542-1547, 1989.

91. Kawakami, Y., Custer, M.C., Rosenberg, S.A., Lotze, M.T.: Interleukin-4 regulates Interleukin-2 induction of lymphokine activated killer activity from human lymphocytes. J. Immunology. 142:3452-3461, 1989.

92. Kawakami, Y., Rosenberg, S.A., Lotze, M.T.: Interleukin-4 promotes the growth of tumor infiltrating lymphocytes specific for human autologous melanoma. J. Exp. Med., 168:2183-2191, 1988.

93. Sakahara, H., Reynolds, J.C., Carrasquillo, J.A., Lora, M.E., Maloney, P.J., Larson, S.M., Neumann, R.D., Lotze, M.T.: In vitro complex formation and biodistribution of mouse antitumor monoclonal antibody in cancer patients. J. Nucl. Med., 30:1311-1317, 1989.

94. Rosenberg, S.A., Packard, B., Aebersold, P.M., Solomon, D., Topalian, S.L., Toy, S., Simon, P., Lotze, M.T., Yang, J.C., Seipp, C.A., Simpson, C., Carter, C., Bock, S., Schwartzentruber, D., Wei, J.P., White, D.E.: Immunotherapy of patients with metastatic melanoma using tumor infiltrating lymphocytes and Interleukin-2: Preliminary report. N. Engl. J. Med., 319:1676-1680. 1988.

95. Rosenberg SA, Lotze MT, Yang JC, Topalian SL, Chang AE, Schwartzentruber DJ, Aebersold P, Leitman S, Linehan WM, Seipp CA, White DE and Steinberg SM. Prospective Randomized Trial of High-Dose Interleukin-2 Alone or In Conjunction with Lymphokine-Activated Killer Cells for the Treatment of Patients with Advanced Cancer. JNCI, 85: 622-632, 1993.

96. Stötter H., Wiebke E.A., Tomita S., Belldegrun A., Topalian S., Rosenberg S.A., Lotze M.T.: Cytokines alter target cell susceptibility to lysis: II. Evaluation of tumor infiltrating lymphocytes. J. Immunol., 142:1676-1773, 1989.

97. Denicoff, K.D., Durkin, T.M., Lotze, M.T., Quinlan, P.E., Davis, C.L., Listwak, S.J., Rosenberg, S.A., Rubinow, D.R.: The neuroendocrine effects of Interleukin-2 treatment. J. Clin. Endocrinology and Metabolism, 69:402-410, 1989.

98. Ognibene, F.P., Rosenberg, S.A., Lotze, M.T., Skibber, J., Parker, M.M., Shelhamer, J.H., and Parrillo, J.E.: Interleukin-2 administration causes reversible hemodynamic changes and left ventricular dysfunction similar to those seen in septic shock. Chest. 94:750-754, 1988.

99. Larson, ST., Carrasquillo, J., Reynolds, J., Deenan, A., Sugarbaker, P.,Colcher, D., Schlom, J., Neumann, R., Hellstrom, I., Hellstrom, K., Mulshine, J.,Lotze, M., and Strudler, P.: The NIH experience with radiolabeled monoclonal antibodies: lymphoma, melanoma, and colon cancer. In: Radiolabeled monoclonal antibodies for imaging and therapy, SC Srivastava, ed., Plenum Publishing Corp., New York, 1988.

100. Jablons, D.M., McIntosh, J.K., Mule, J.J., Nordan, J.J., Rudikiff, S., and Lotze, M.T.: Induction of Interferon-B_2/ Interleukin-6 (IL-6) by cytokine administration and detection of circulating IL-6 in the tumor-bearing state In: Regulation of the Acute Phase and Immune Responses: A New Cytokine, Ed: Sehgal P.B., Grieninger, G., and Tosato, G., Ann. 557:157-162 Annals New York Acad. Science,1989.

101. McIntosh, J.K., Mule, J.J., Jablons, D.M., Nordan, R.P., Rudikoff, S., Lotze, M.T., Rosenberg, S.A.: The kinetics of IL-6 induction by systemic administration of rhTNF-á in mice. Annals New York Academy of Sciences, 557:572-575, 1989.

102. Lotze, M.T., Kawakami, Y., and Rosenberg, S.A.: Immunotherapy Protocols at the National Cancer Institute: Current Status and Future Prospects. Colloque Inserm 179:153-162, 1989.

103. Laue, L., Lotze, M.T., Chrousos, G.P., Barnes, K., Loriaux, L., and Fleisher,T.A.: Effect of chronic treatment with the glucocorticoid antagonist RU486 in man: toxicity, immunological and hormonal aspects. J. Clin. Endocrinol. 71:1474-80, 1990

104. Kasid, AT., Director, E., Stovroff, M.C., Lotze, M.T., Rosenberg, S.A.: Cytokine regulation of tumor necrosis factor-á and â (lymphotoxin)- messenger RNA expression in human peripheral blood lymphocytes. Cancer Res. 50: 5072-6, 1990.

105. Fisher, B., Keenan, A., Garra, B.S., Steinberg, S.M., White, D.E., DeBisceglie, A.M., Hoofnagle, J.H., Yolles, P., Rosenberg, S.A., Lotze, M.T.: Interleukin-2 induces profound reversible cholestasis: A detailed analysis in treated patients. J. Clin. Oncol. 7:1852-1862, 1990.

106. Rosenberg, S.A., Lotze, M.T., Yang, J.C., Linehan, W.M., Seipp, C., Calabro, S., Karp, S.E., Sherry, R.M., Steinberg, White, D.E.: Combination therapy with Interleukin-2 and Alpha-Interferon for the treatment of patients with advanced cancer. J. Clin. Oncology 7:1863-1874, 1989.

107. Ward, B., McGarvey, C., Lotze, M.T.: Functional outcome following partial or total scapulectomy/Analysis at prolonged follow-up. Arch Surg. 124:537-542, 1989.

108. Bock, S.N., Lee, R.E., Fisher, B., Rubin, J.T., Schwartzentruber, D., Wei, J.P., Callender, D., Yang, J.C., Lotze, M.T., Pizzo, P.A., Rosenberg, S.A.: A prospective randomized trial evaluating prophylatic antibiotics to prevent catheter-related sepsis in patients treated with immunotherapy. J Clin Oncol 8:161-169, 1990.

109. Wade, TP, Lotze, MT: Lymph stasis after lymph node dissection.In: Lymph Stasis: Pathophysiology, Diagnosis, and Treatment, WL Olszewski Ed. Year Book Pub 1991.

110. Custer, M.C., Lotze, M.T.: A biologic assay specific for Interleukin-4: Rapid Fluorescence Assay for IL-4 detection in supernatants and serum, J. Imm. Methods, 128: 109-17, 1990.

111. Lotze, M.T.: Letter to the editor; High output cardiac failure in patients with multiple myeloma. New Eng. J. of Medicine, 320:1419, 1989.

112. Rubin, J.T., Elwood, L., Rosenberg, S.A., Lotze, M.T.: Immunohistochemical Correlates of Response to Recombinant Interleukin-2 Based Immunotherapy, Cancer Research, 49:7086-7092, 1989.

113. Jablons, D., Bolton, E., Mertins, S., Rubin, M., Pizzo, P., Rosenberg, S.A., Lotze, M.T.:Interleukin-2 Based Immunotherapy Alters Circulating Neutrophil Fc Receptor Expression and Chemotaxis. J. Immunology, 144:3630-3636, 1990.

114. Culver, K., Cornetta, K., Morecki, S., Aebersold, P., Freeman, S., Kasid, A., Morgan, R., Lotze, M.T., Rosenberg, S.A., Anderson, W.F., Blaese, R.M.: Gene Therapy: Lymphocytes As Cellular Vehicles For Gene Transfer In Mouse And Man. Proc.Nat.Acad.Sci. 88:3155-3159, 1992.

115. Kragel, A.H., Travis, W.D., Feinberg, L., Pittalugia, S., Striker, L.M., Roberts, W.C., Lotze, M.T., Yang, J.J., Rosenberg, S.A.: Pathologic Findings Associated with Interleukin-2 Based Immunotherapy For Cancer: A Postmortem Study of 19 Patients. Human Pathology, 21:493-502, 1990.

116. Rosenberg, S.A., Lotze, M.T., Yang, J.C., Aebersold, P.M., Linehan, W.M., Seipp, C.A., White, D.E.: Experience With The Use Of High Dose Interleukin-2 In The Treatment Of 652 Patients With Cancer. Ann. Surg, 210:474-485, 1989.

117. Huang, C.M., Ruddle, M., Sliva, C., Elin, R.J., Lotze, M.T., Rosenberg, S.A.: Changes In Laboratory Results With Interleukin-2 Therapy Administered To Cancer Patients. Clin. Chemistry, 36:431-434, 1990.

118. Lotze, M.T.: Interleukin-2 Based Immunotherapy Of Malignant Melanoma, in Therapy of Advanced Melanoma Ed. P. Rumke, S. Karger AG, Basel, Pigment Cell 10: 163-182, 1990.

119. McIntosh, J.E., Jablons, D.M., Mule, J.J., Nordan, R. P., Rudikoff, S., Lotze, M.T., Rosenberg, S.A.: In Vivo Induction of IL-6 by Administration of Exogenous Cytokins and Detection of De Novo Serum Levels of IL-6 in Tumor-Bearing Mice. J. Immunology., 143:162-167, 1989.

120. Kasid, A., Morecki, S., Aebersold, P., Cornetta, K., Culver, K., Freeman, S., Director, E., Lotze, M.T., Blaese, R.M., Anderson, F., Rosenberg, S.A.: Human Gene Transfer: Characterization of human tumor infiltrating lymphocytes as vehicles for retroviral mediated gene transfer in man. Pro. Nat. Acad. Sci., 87:473-477, 1990.

121. Rubin, J.T., Rosenberg, S.A., Lotze, M.T.: The efficacy of high dose IL-2 based immunotherapy in man. in Rees RC Ed IRL Press, pp. 139-159, 1990. The Biology and Clinical Applications of Interleukin-2.

122. Stotter, H., Lotze, M.T.: Cytolytic effector cells against human tumors: Distinguishing phenotype and function. Cancer Cells, 2:44-56, 1990.

123. Lotze, M.T., Custer, M.C., Bolton, E.S., Wiebke, E.A., Kawakami, Y., Rosenberg, S.A.: Mechanisms of immunologic antitumor therapy: lessons from the laboratory and clinical

applications. Human Immunology, 28:198-207, 1990.

124. Lotze, M.T., Jablons, D.M., Rubin, J.T., Chang, A.E., Rosenberg, S.A.: Cytokine therapy of patients with cancer. Progress In Immunology, 7:1213-1220, 1990.

125. Jablons, D.M., Donohue, R., Kawakami, Y., Young, J., Lotze, M.T.: Interleukin-3 induces proliferation but not lymphokine activated killer activity from human and murine mononuclear cells. Eur Cytokine Network, 1990,

126. Kawakami, Y., Haas, G.P., Lotze, M.T.: Expansion of Tumor Infiltrating Lymphocytes from Human Tumors Using the T cell Growth Factors Interleukin-2 and Interleukin-4. J. Immunotherapy 14:336-47, 1993.

126a. Lotze, M.T.: Biological Response Modifiers in Cancer Therapy (book review). Immunology Today, 11:143, 1990.

127. Lotze, M.T.: Interleukin-2-Basic Principles, in Principles and Practice of Biologic Therapy, DeVita, V., Hellman, S., Rosenberg, S.A. J Lippincott, Phila., 1991.

128. Lotze, M.T.: Cancer Treatment with Interleukin-2, Principles and Practice of Biologic Therapy, ed DeVita, V, Hellman, S., Rosenberg, S.A. J Lippincott, Philadelphia, 1991.

129. Lotze, M.T.: Disturbing Homeostasis: Recent results of ongoing immunotherapy trials at the NCI. Biotechnology Therapeutics, 1:125-162, 1989.

130. Lotze, M.T.: Book Review, Biologic Response Modifiers in Cancer Therapy. Immunology Today. 11:143, 1990.

131. Lotze, M.T.: Preface - Current paradigms in cellular immunology: Implications for immunity to cancer. In Cellular Immunology and the Immunotherapy of Cancer. ed Lotze, M.T. and Finn, O., Wiley-Liss, New York, 1990.

132. Lotze, M.T., Custer, M.C., Kawakami, Y., Stotter, H.,Rubin, J.T., Bolton, E.S., Guedez, L. and Sanda, M.G.: T cell growth factors and the expansion of lymphoid cells with antitumor activity in vitro and in vivo. In Cellular Immunity and the Immunotherapy of Cancer. eds. Lotze, M.T. and Finn, O.J. Wiley-Liss, New York, 1990.

133. Stötter, H., Custer, M.C., Bolton, E.S., Guedez, L. and Lotze, M.T.: Interleukin-7 induces human lymphokine activated killer (LAK) cells and is regulated by interleukin-4. J. Immunol 146: 150-144, 1991.

134. Lotze, M.T. and Finn, O.J.: Current Paradigms In Cellular Immunity: Implications for immunity to cancer. Immunology Today. 11:190 - 3, 1990

135. Lotze, M.T. and Rosenberg S. A.: The Use of Lymphokines in therapy, in Progress in Allergy and Clinical Immunology ed. W.J. Pickles, B. M. Stadler, C. Dahinden et al; Hogrefe & Huber, Toronto pp. 529-536, 1989.

136. Rosenberg, S.A., Aebersold, P., Cornetta, K., Kasid, A., Morgan, R.A., Moen, R., Karson, E.M., Lotze, M.T., Yang, J.C., Topalian, S.L., Merino, M.J., Culver, K., Miller, A.D., Blaese, R.M. and Anderson, W.: Gene transfer into humans: Immunotherapy of patients with advanced melanoma using tumor infiltrating lymphocytes modified by retroviral gene transduction. N. Engl. J. Med. 323: 570-578, 1990.

137. Stötter, H. and Lotze, M.T.: Human Lymphokine Activated Killer Activity: Role of Interleukin-2, Interleukin-4, and Interleukin-7. Arch Surg 126:1525-30, 1991.

138. Aebersold, P., Hyatt, S., Johnson, S., Hinesk, Korcak, L., Sanders, M., Lotze, M., Topalian, S., Yang, J. and Rosenberg, SA: Lysis of autologous melanoma cells by tumor infiltrating lymphocytes: Association with clinical response. Journal of the National Cancer Institute, 83: 932-937, 1991.

139. Feuerstein, I. M., Chow, C. K., Miller, D.L., Carrasquillo.J.A., Lotze, M.T., Radiologic Findings in Hepatocellular Carcinoma: The National Institutes of Health Experience in Hepatocellular Carcinoma, Ed. Tabor E, DiBesceglie A and Purcell RH. pp. 255-272, 1991.

140. Spencer W. F., Linehan, W. M., Walther, M.M., Lotze, M.T., Topalian, S., Yang, J., Merino, M. J., Lange, J. R., Pockaj, B.A., and Rosenberg, S.A.: The Role of Pre-nephrectomy IL-2 based immunotherapy in patients with metastatic renal cell carcinoma, J. Urology.147:24-30, 1992.

141. Wong, H. L., Lotze, M.T., Wahl, L.M., Wahl, S.M.: Administration of recombinant IL-4 to humans regulates gene expression, phenotype, and function in circulating monocytes. J. Immunol. 148:2118-2125, 1992.

142. Lotze, M.T.: T cell growth factors and the treatment of patients with cancer. Clinical Immunology and Immunopathology 62:s47-s54, 1992.

143. Edington, H.D., and Lotze, M.T.: Immunotherapy of human sarcomas. Postgraduate General Surgery 3:36-41, 1991.

144. Lotze, M.T.: Interleukin-2 in Human Cytokines, ed Aggarwal BB, Gutterman JV, Blackwell Scientific Publications, Cambridge, 1991.

145. Rubin J. T. and Lotze M.T.: Acute Gastric Mucosal Injury Associated with Systemic Administration of Interleukin-4. Surgery 111:274-280, 1991.

146. Lotze, M.T.: Concerning repeat hepatic resections for colorectal cancer (letter to editor) Surgery 109:347-348, 1991.

147. Lotze, MT. Healing Arts (journal review article) Nature 347: 587-588, 1990.

148. Lotze MT and Kramarski CM. Shoulder immobilizer for axillary nodal dissection: A "safe" device. Contemporary Oncology, 1991.

149. Lotze MT. Sui Generis (journal review article). Nature 1991.

150. Lotze MT. Role of IL-4 in the antitumor response in H. Spits,ed. Interleukin-4 Raven Press, 1992, Chapter 15, 237-262.

151. Choyke PL, Miller DL, Lotze MT, Whiteis J, Ebbat B, and Rosenberg SA. Delayed reaction to intravenous contrast media following Interleukin-2 immunotherapy. Radiology 183:111-114, 1992.

152. Lotze MT. Trials and Tribulations: The Cost of Developing Gene Therapies (Editorial) FASEB Jl 5:3013-3014, 1991.

153. Emery BE, Igarashi Y, White MV, Mullol J, Berkebile C, Peden D, Lotze MT, and Kaliner MA. The effect of IL-4 Upon Human Nasal Mucosal Responses. Jl Allergy and Clinical Immunology, 90:772-81, 1992.

154. Lotze MT. Clinical Protocol: The treatment of patients with melanoma using IL-2, IL-4, and tumor infiltrating lymphocytes. Human Gene Therapy, 3: 167-177, 1992.

155. Lotze MT, Zeh HJ, Elder EM, Cai Q, Pippin BA, Whiteside TL and Herberman RB. Use of T-cell Growth Factors (IL-2 to IL-12) in the investigation and treatment of melanoma. J. Immunotherapy, 12: 212-217, 1992

156. Weidmann E, Elder EM, Trucco M, Lotze MT, and Whiteside TL. Usage of the T-Cell receptor Vâ chain genes in fresh and cultured tumor-infiltrating lymphocytes from human melanoma. Int. J. Cancer 54:383-390, 1993.

157. Tahara H, Mueller GM, Ricordi C, Robbins PD, Lotze MT. Islet cell transplantation facilitated by gene transfer. Transplant. Proc. 24:2975-2976, 1992.

158. Wong HL,Costa GL, Lotze MT,Wahl SM.IL-4 differentially regulates monocyte IL-1 family gene expression and synthesis in vitro and in vivo. J Exp Med177:775-81,1993.

159. Richards JM and Lotze MT. Interleukin-2 Therapy:Current Status and Future Directions. Contemporary Oncology 2:34-44, 1992.

160. Lotze MT. Keystone Symposium. Melanoma and Biology of the Neural Crest. Melanoma Res, 2:131-138, 1992.

161. Lange JR, Raubitschek AA, Pockaj BA, Spencer WF, Lotze MT, Topalian SL, Yang JC and Rosenberg SA. A pilot study of combination of Interleukin-2 based immunotherapy and radiation therapy. J. Immunotherapy, 12: 265-271, 1992.

162. Sanda MG, Yang JC, Topalian SL, Groves ES, Childs A, Rubens R, deSmet MD, Schwartzentruber DJ, White DE, Lotze MT and Rosenberg SA. Intravenous administration of recombinant human macrophage colony-stimulating factor to patients with metastatic cancer: A Phase I Study. J Clin Onc, 10: 1643-1649, 1992.

163. Rubin JT, Duquesnoy R, Day R, Simonis TB, Rosenberg SA and Lotze MT. HLA-DQ1 is associated with clinical response and prolonged survival of patients with melanoma who are treated with interleukin-2 based immunotherapy in humans. Therapeutic Immunology, 2:1-6, 1995.

164. Lotze MT, Carr B and Flickenger J. Hepatobiliary Neoplasms in Principals and Practices of Oncology, Rosenberg, DeVita and Hellman (ed) J. B. Lippincott, 883-914, 1993.

165. Miller DL and Lotze MT. A Plea for a Standard Standard. Intraarterial chemotherapy for hepatic neoplasms. Radiology 188:19-20, 1993.

166. Itoh I, Storkus WJ, Gorelik E and Lotze MT. Partial purification of murine tumor-associated peptide epitopes common to histologically distict tumors, melanoma and sarcoma that are presented by H-2K^b and recognized by CD8+ Tumor Infiltrating Lymphocytes. J Immunology 153:1202-15, 1994.

167. Lotze MT, Storkus WJ, Hurd SD, Maeurer MJ, Kirkwood JM. Immunotherapy of melanoma. Melanoma Research 3:5-6, 1993.

168. Edington H and Lotze MT. Immunotherapy, in Colorectal Cancer, ed. HJ Wanebo, Mosby, St. Louis, pp540-564, 1993.

169. Edington HD and Lotze MT. Cellular Immunotherapy for Colorectal Cancer.in Cohen AM, Winawer SJ, Friedman MA, Gunderson LL (editors), Cancer of the Colon, Rectum and Anus; McGraw-Hill, Inc., NY, pp949-959, 1995.

170. Robbins PD, Tahara H, Mueller G, Hung G, Bahnson A, Zitvogel L, Galea-Lauri J, Ohashi T, Patrene K, Boggs SS, Evans CH, Barranger JA and Lotze MT. Retroviral Vectors for use in Human Gene Therapy for Cancer, Gaucher Disease, and Arthritis. Annals of the New York Acad. Sci.716:72-88, 1994.

171. Zeh HJ, Hurd S, Storkus WJ, and Lotze MT. Interleukin 12 Promotes the Proliferation and Cytolytic Maturation of Immune Effectors: Implications for the Immunotherapy of Cancer. J Immunotherapy 14:155-161, 1993.

172. Zeh HJ, Tahara H, and Lotze MT. Interleukin-12. Chapter 13 in The Cytokine Handbook, Second Edition; pp 239-256; Editor, A. Thomson, Academic Press, Ltd; London; 1994.

173. Nastala CL, Edington HD, Storkus WJ and Lotze MT. Recombinant Interleukin-12 (r-mIL-12) Mediates Regression of Both Subcutaneous and Metastatic Murine Tumors. Surgical Forum 44:518-521, 1993.

174. Nastala CL, Edington H, Storkus W, McKinney TG, Brunda M, Gately M, Wolf SF, chrieber R and Lotze MT. Recombinant Interleukin-12 Induces Tumor Regression in Murine Models: Interferon-Gamma But Not Nitric Oxide Dependent Effects. J. Immunol 153,:1697-1706, 1994.

175. Tahara H, Zeh H, Storkus WJ, Pappo I, Watkins S, Gately MK, Gubler U, Wolf SF, Robbins PD and Lotze MT. Fibroblasts Genetically Engineered to Secrete Interleukin-12 can Suppress Tumor Growth In Vivo and Induce Antitumor Immunity To A Murine Melanoma. Cancer Res. 54:182-189, 1994.

176. Lotze MT. Transplantation and Adoptive Cellular Therapy of Cancer: The Role of T cell Growth Factors. Cell Transplantation, 2:33-47, 1993.

177. Storkus W. J., Zeh III, H. J., Salter R. D., Lotze, M. T. Identification of T cell epitopes: Rapid isolation of class I-presented peptides from viable cells by mild acid elution. J. Immunother.14:94-103, 1993.

178. Storkus W. J., Zeh III, H. J., Salter R. D., Lotze, M. T. Isolation of human melanoma peptides recognized by class I restricted tumor infiltrating T lymphocytes. J. Immunol.151:3719-3727, 1993.

179. Lotze MT, Rubin JT and Zeh HJ. New Biologic Agents Come to Bat for Cancer Therapy. Current Science, 4: 1116-1123, 1992.

180. Marincola FM, Venzon D, White D, Rubin JT, Lotze MT, Simonis TB, Balkisson J, Rosenberg SA, Parkinson DR. HLA association with response and toxicity in melanoma patients treated with interleukin-2 based immunotherapy. Cancer Research 52:6561-6, 1992.

181. Rubin JT, Lotze MT. Immune function and dysfunction. A primer for the Radiologist. Radiologic Clinics of North America 30:507-23, 1992.

182. White MV, Igarashi Y, Emery BE, Lotze MT, Kaliner MA. Effects of *in vivo* administration of interleukin-2 (IL-2) and IL-4 alone and in combination, on *ex vivo* human basophil histamine release. Blood 79:1491-5, 1992.

183. Oppenheim MH, Lotze MT. Interleukin-2: Solid Tumor Therapy. Oncology 51:154-69, 1994.

184. Leder GH, Oppenheim M, Rosenstein M, Shah N, Hoffman R, Lotze MT, Beger HG. Inhibition of nitric oxide synthesis does not improve Interleukin-2-mediated antitumor effects in vivo. Eur Surg Res 28:167-78, 1996.

185. Lotze MT, Finn OJ. Cellular immunity and the immunotherapy of cancer. J.Immunother. 14:79-87, 1993.

186. Lotze MT, Agarwala SS, Kirkwood JM.Clinical Development of IL-2. Oncology 1993.

187. Zeh HJ, Salter RD, Techtor M, Leder G, Stuber G, Modrow S, Lotze MT, Storkus WJ. Flow cytometric determination of peptide-Class I complex formation: Identification of p53 peptides binding HLA-A2. Human Immunology 39:79-86, 1994.

188. Hunt JD, Pippin AB, Landreneau RJ, Jacob WF, Lotze MT, Siegfried JM. Transfer and expression of the human Interleukin-4 gene in carcinoma and stromal cell strains derived from lung cancer patients. J Immunotherapy 14:314-21, 1993.

189. Irshaid Y, Adedoyin A, Lotze M, Branch R. Monoacetyldapsone inhibition of dapsone hydroxylation by human and rat liver microsomes. Drug Metab.Disp. 22:161-4, 1994.

190. Leder GH, Storkus WJ, Zeh HJ, Lotze MT. Can p53 peptides serve as tumor-specific antigens? Peptides 1992, Ed. SH Schneider, AN Eberle. ESCIM Science Pub. 1993.

191. Rosenberg SA, Lotze MT, Yang JC, Topalian SL, Chang AE, Schwartzentruber DJ, Aebersold P, Leitman S, Linehan WM, Seipp CA et al.Prospective randomized trial of high-dose IL-2 alone or in conjunction with lymphokine-activated killer cells for the treatment of patients with advanced cancer. Jl. Nat. Cancer Inst. 85:622-32, 1993.

192. Edington HD, Lotze MT. Interleukin 7 in Cytokine Handbook, ed. Angus Thompson, 1994.

193. Lotze MT. Biologic Response Modifiers and the Treatment of Infectious Diseases in Surgical Infectious Diseases 3rd Edition; ed. RJ Howard, RL Simmons, 1994; Appleton and Lange, Norwalk, CN; pp 595-616.

194. Lotze MT. Molecular biology and clinical applications to cancer. Curr. Opinion in General Surgery 2:245-254, 1994.

195. Lotze MT. What's New in Surgical Oncology. Bull. Amer. Coll. Surg.79:42-47, 1994.

196. Pappo I, Tahara H, Nishihara K, Robbins PD, Gately MK, Wolf SF, Lotze MT. Administration of systemic or local interleukin-2 enhances the antitumor effects of interleukin-12 gene therapy. J. Surg. Res, 57:218-226, 1995.

197. Lotze MT. Soft Tissue Sarcomas: Diagnosis and Treatment Ed. John H. Raaf (Book Review). N. Engl. J. Med. 329:1284-1285, 1993.

198. Qin L, Chavin KD, Tahara H, Robbins PD, Lotze MT, Favarro J, Woodward J, Ding Y, Bromberg JS. Retrovirus-Mediated Transfer of Viral Interleukin-10 Gene Prolongs Murine Cardiac Allograft Survival. J Immunology 156:2316-2324, 1996.

199. Leder GH, Oppenheim M, Rosenstein M, Shah N, Hoffman R, Simmons R, Lotze MT. The IL-2 induced nitric oxide production but not the IL-2 induced capillary leak syndrome is decreased by aminoguanidine.3rd International Nitric Oxide Mtg.

200. Stuber G, Leder GH, Storkus WJ, Lotze MT, Modrow S, Szekely L, Wolf H, Klein E, Karre K, and Klein G. Identification of wild-type and mutant p53 peptides binding to HLA-A2 assessed by a peptide loading deficient cell line assay and a novel MHC Class I peptide binding assay. Eur. J. Immunol. 24:765-8, 1994.

201. Maeurer MJ, Hurd S, Martin D, Storkus WJ,, Lotze MT. Cytolytic T-cell clones define HLA-A2 restricted human cutaneous melanoma peptide epitopes - correlation with T-cell receptor usage. The Cancer Journal 2:162-170, 1995.

202. Maeurer MJ, Storkus WJ, Lotze MT. Tumor Vaccines. Principles of Clinical Immunology, Robert Rich, Editor, 1995.

203. Shaw S, Luce GG, Gilks WR, Anderson K, Ault K, Bochner BS, Boumsell L, Denning SM, Engleman EG, Fleisher T, Freedman AS, Fox DA, Gailit J, Gutierrez-Ramos JG, Hurtubise PE, Lansdorp P, Lotze MT, Mawhorter S, Marti G, Matsuo Y, Minowda J, Michelson A, Picker L, Ritz J, Roos E, van der Schoot CE, Springer TA, Tedder TF, Telen MJ, Thompson JX, Valent P. Leukocyte differentiation antigen database. in Leukocyte Typing V; edited by Schlossman S, Boumsell L, Gilks W, Harlan J, Kishimoto T, Morimoto C, Ritz J, Shaw S, Silverstein R, Springer T, Tedder T, and Todd R. Oxford University Press, 1994.

204. Pockaj BA, Yang JC, Lotze MT, Lange JR, Spencer WF, Steinberg SM, Topalian SL, Schwartzentruber DJ, White DE, Rosenberg SA. A prospective randomized trial evaluating colloid versus crystalloid resuscitation in the treatment of the vascular leak syndrome associated with Interleukin-2 therapy. J. Immunotherapy 15:22-28, 1994.

205. Zitvogel L, Tahara H, Robbins PD, Storkus WJ, Wolf SF, Gately M, Lotze MT.Construction and characterization of retroviral vectors expressing biologically active human Interleukin 12 (IL-12). Human Gene Therapy 5:1493-1506, 1994.

206. Tahara H, Lotze MT. Antitumor effect of interleukin-12 (IL-12): Applications for the immunotherapy and gene therapy of cancer. Gene Therapy 2:96-106, 1995.

207. Thomson AW, Lotze MT. Interleukins 13-15. Chapter 14; pp 257-264 in The Cytokine Handbook, Second Edition; Editor, A. Thomson, Academic Press, Ltd; London; 1994.

208. Pippin BA, Rosenstein M, Jacob WF, Chiang Y, Lotze MT. Local IL-4 delivery enhances immune reactivity to murine tumors: gene therapy in combination with IL-2. Cancer Gene Therapy, 1:1-7, 1994.

209. Lotze MT, Rubin JT. Gene Therapy of Cancer: A pilot study of IL-4-gene-modified fibroblasts admixed with autologous tumor to elicit an immune response. Human Gene Therapy 5:41-56, 1994.

210. Strumph PS, Carty SE, Rilo HLR, Carroll PB, Ricordi C, Lotze MT. Interleukin-1 receptor antagonist is not detrimental to human islet cell insulin secretion but decreases insulin content. Transplantation Proceedings 26: 694, 1994.

211. Qin L, Chavin KD, Ding Y, Favaro JP, Woodward JE, Lin J, Tahara H, Robbins P, Shaked A, Ho D, Sapolsky R, Lotze MT, Bromberg JS. Multiple vectors effectively achieve gene transfer in a murine cardiac transplantation model. Transplantation 59:809-816, 1995.

212. Nishihara K, Barth RF, Wilkie N, Lang JC, Oda Y, Kikuchi H, Everson MP, Lotze MT. Increased in vitro and in vivo tumoricidal activity of a genetically engineered macrophage cell line by an exogenous IFN-ã, IL-4, IL-6 or TNF-á gene expression. Cancer Gene Therapy, 2:113-124, 1995.

213. Storkus WJ, Lotze MT. Biology of Tumor Antigens. B. Tumor Antigens Recognized by Immune Cells. In Biologic Therapy of Cancer, ed. DeVita V, Hellman S, Rosenberg SA. JB Lippincott, Phila. 1995.

214. Nastala CL, McKinney BA, Edington HD, Tahara H, Gately MK, Storkus WJ, Lotze MT. Interleukin-12 (IL-12) induces specific anti-tumor immunity in animals bearing established subcutaneous murine sarcoma. Surgical Forum, 80:492-494, 1994.

215. Höhnke C, Nastala CL, Tahara H, Suzuki T, Edington HD, Lotze MT. The use of gene transfer of viral IL-10 to facilitate allogeneic skin transplantation. Surgical Forum, 80:776-779, 1994.

216. Castelli C, Storkus WJ, Maeurer MJ, Martin DM, Huang EC, Pramanik BN, Nagabushan TL, Parmiani G, Lotze MT. Mass spectrometric identification of a naturally-processed melanoma peptide recognized by CD8+ cytotoxic T lymphocytes. J Exp Med,181:363-368, 1995.

217. Lotze MT. Interleukin 2 - Preclinical Studies. In Biologic therapy of Cancer, Ed. Devita V., Hellman S, Rosenberg SA. JB Lippincott, Phila. 1995.

218. Maeurer MJ, Martin DM, Castelli C, Elder E, Leder E, Storkus WJ, Lotze MT. Host immune response in renal cell cancer. IL-4 and IL-10 mRNA are frequently detected in freshly collected tumor infiltrating lymphocytes. Cancer Immunology and Immunotherapy 41:11-121, 1995.

219. Maeurer MJ, Storkus WJ, Lotze MT. New avenues of cancer treatment: Modulation of host anti-tumor directed immune responses by IL-4 and IL-12 in renal cell cancer. In Biology of Renal Cell Carcinoma, Ed. RM Bukowski, JH Finke, Klein EA.Springer-Verlag, New York, pp161-174, 1995.

220. Cai Q, Rubin JT, Lotze MT. Genetically marking human cells - Results of the first clinical gene transfer studies. Cancer Gene Therapy, 2:125-136, 1995.

221. Tahara H, Zitvogel L, Storkus WJ, Zeh HJ, McKinney TG, Schreiber RD, Gubler U, Gately MK, Robbins PD, Lotze MT. Effective eradication of established murine tumors with therapy using a polycistronic retroviral vector. J. Immunol. 154:6466-6474, 1995.

222. Chavin KD, Qin L, Tahara H, Robbins PD, Lotze MT, Bromberg JS. Gene transfer of TGF-â and viral IL-10 prolong cardiac allograft survival. Surg. Forum 44:404-9,1993.

223. Frassanito MA, Mayordomo JI, DeLeo RM, Storkus WJ, Lotze MT, DeLeo AB. Identification of Meth A sarcoma-derived class I MHC-associated peptides recognized by a specific CD8+ CTL. Cancer Research 55:124-128, 1995.

224. Lotze MT, Rubin JT, Whiteside TL, Herberman RB. Cytokine and Cellular Mediated Immunotherapy of Cancer. Chapter 122 in Principles of Clinical Immunology, pp1919-1930; Robert Rich, Editor, Mosby Yearbook, Inc., St. Louis, 1996.

225. Tahara H, Lotze MT. Gene Therapy for Adult Cancers: Advances in Immunologic Approaches Using Cytokines. Chapter 15 in Somatic Gene Therapy, pp 263-286; Patricia L. Chang, Editor, CRC Press, Inc. Boca Raton, FL, 1994.

226. Suzuki T, Tahara H, Robbins P, Narula S, Moore K, Lotze MT. The human herpes virus 4 cIL-10 homologue, vIL-10 induces local anergy to tumor allo and autografts. J. Exp. Med.182:477-486, 1995.

227. Zitvogel L, Tahara H, Robbins PD, Storkus WJ, Clark M, Nalesnik M, Gately M, Lotze MT. Cancer immunotherapy of established tumors with Interleukin-12 (IL-12): Effective delivery by genetically engineered fibroblasts. J. Immunology 155:1393-1403, 1995.

228. Di Bisceglie AM, Simpson LH, Lotze MT, Hoofnagle JH. Development of hepatocellular carcinoma among patients with chronic liver disease due to Hepatitis C viral infection. J Clin Gastroenterol 19:222-226, 1994.

229. Schwarz RE, Reynolds JC, Lotze MT. "Pseudo-pseudotumor" of the liver. Adenocarcinoma presenting as an inflammatory pseudotumor. Digestive Diseases & Sciences 39:2679-84, 1994.

230. Goydos JS, Lotze MT. Biologic Therapy: Current and Future Considerations. Chapter 73 in Surgery for Gastrointestinal Cancer: A Multidisciplinary Approach. pp831-848, Harold J. Wanebo, editor; Lippincott-Raven Publishers; Philadelphia; 1997.

231. Suminami Y, Elder EM, Lotze MT, Whiteside TL. *In situ* IL-4 gene expression in cancer patients treated with a genetically-modified tumor vaccine. Journal of Immunotherapy 17:238-248, 1995.

232. Elder EM, Lotze MT, Whiteside TL. Successful culture of cytokine gene-modified human dermal fibroblasts for biologic therapy of patients with cancer. Human Gene Therapy 7:479-487, 1996.

233. Mayordomo JI, Zorina T, Storkus WJ, Celluzzi C, Falo LD, Melief CJ, Ildstad ST. Kast WM, DeLeo A, Lotze MT. Bone marrow-derived dendritic cells pulsed with tumor peptides effectively treat established murine tumors. Nature - Medicine 1(12):1297-1302, 1995

234. Myers JN, Yasumura S, Suminami Y, Hirabayashi H, Lin W-C, Johnson JT, Lotze MT and Whiteside TL. Growth stimulation of human head and neck squamous cell carcinoma cell lines by Interleukin-4.Clin. Cancer Research 2:127-136, 1996.

235. Maeurer MJ, Wolter W, Zitvogel L, Storkus WJ, Lotze MT. The role of Interleukin-7 in the expansion of colon cancer - specific and MHC Class II restricted tumor infiltrating lymphocytes (TIL) in vitro and in vivo. Cancer Gene Therapy, 1995

236. Maeurer MJ, Storkus WJ, Kirkwood JM, Lotze MT. Immunization with melanoma derived peptide T-cell epitopes represents a new treatment option for patients with melanoma. Melanoma Research,6:11-24, 1996.

237. Maeurer MJ, Martin D, Elder E, Storkus WJ, Lotze MT. Detection of naturally processed and HLA-A1 presented melanoma T-cell epitopes defined by CD8+ T-cells releasing GM-CSF, but not mediating target cytolysis. Clinical Cancer Research 2:87-96, 1996.

238. Maeurer MJ, Gollin S, Storkus WJ, Swaney W, Martin D, Castelli C, Salter R, Knuth A, Lotze MT. Tumor escape from immune recognition.Loss of HLA-A2 melanoma cell surface expression is associated with a complex rearrangement of the short arm of chromosome 6. Clin. Cancer Res. 2:641-652, 1996.

239. Celluzzi CM, Mayordomo JI, Storkus WJ, Lotze MT, Falo LD. Peptide-pulsed dendritic cells induce antigen specific CTL-mediated protective tumor immunity. J Exp Med 183:283-287, 1996.

240. Zitvogel L, Mayordomo JI, Tjandrawan T, DeLeo AB, Clarke ML, Lotze MT, Storkus WJ. Therapy of Murine Tumors with Tumor Peptide-pulsed Dendritic Cells: Dependence on T Cells, B7 Costimulation, and T Helper Cell 1-associated Cytokines. J Exp Med 183:87-97, 1996.

241. Rubin JT, Lotze MT, Rosenfelder D, Brumfield A, Howells R, Schwartz R, Sylvestri S, Sammon J, Bron K, Orens P, Zajko A, Swanson D, Day R. Treatment of hepatic-metastatic colorectal cancer with a chemotherapeutic emulsion: interim results of a phase I trial. Ann Surg Oncol 2:351-359, 1995.

242. Zitvogel L, Lotze MT. Role of Interleukin-12 (IL-12) as an antitumor agent: Experimental biology and clinical application. Research Immunology 146:628-637, 1995.

243. Pippin BA, Lotze MT. Cytokine Gene Therapy of Cancer in Aggarwal BB, Puri RK; Human Cytokines: Their Role in Disease and Therapy; Blackwell Science, Cambridge, pp675-688; 1995.

244. Lotze MT. Interleukin-2. In *Growth Factors and Cytokines in Health and Disease.* Ed. Derek LeRoith and Carolyn Bondy, JAI Press, Inc; Greenwich, CT; 199; pp1-47.

245. Tahara H, Lotze MT, Robbins PD, Storkus WJ, Zitvogel L. Clinical Protocol: IL-12 gene therapy using direct injection of tumors with genetically engineered autologous fibroblasts. Human Gene Therapy 6:1607-1624, 1995.

246. Leder GH, Oppenheim M, Rosenstein M, Lotze MT, Beger HG. Addition of IL-12 to low dose Interleukin 2 treatment improves antitumor efficacy in vivo. Z. Gastoenter 33:499-502, 1995.

247. Lotze MT. A new perspective: Cytokine Gene Therapy of Cancer. Cancer J from Scientific American 2:63-72, 1996.

248. Lotze MT, Kirkwood JM. Melanoma and other tumors of the skin. In, Kirkwood JM, Lotze MT, Yasko JM ed. Current Cancer Therapy, 2nd Ed.; Chapter 13, pp298-306; Churchill Livingston. Philadelphia, PA; 1996.

249. Lotze MT, Rubin JT. Biologic Therapeutics. In, Kirkwood JM, Lotze MT, Yasko JM ed. Current Cancer Therapy, 2nd Ed.; Chapter 4, pp66-86; Churchill Livingston. Philadelphia, PA; 1996.

250. Chang AE, Lotze MT, Pardoll DM. Mobilizing the body=s defenses against cancer.Patient Care 30:32-49, 1996.

251. Pappo I, Lotze MT. Immunotherapy of lung cancer. In Landreneau R, editor. Thoracic Surgery, in press.

252. Elder EM, Lotze MT, Whiteside TL. Methods for generation of genetically-modified fibroblasts for immunotherapy of cancer. In Methods in Molecular Biology: Gene Therapy Protocols, Ed. Paul Robbins, in press.

253. Tahara H, Lotze MT. Cancer gene therapy using cytokine genes. Submitted.

254. Maeurer M, Zitvogel L, Storkus WJ, Lotze MT. Human intestinal v) T-cells respond exclusively to SEB, but not to SEA. Natural Immunity 14:188-97, 1995.

255. Zitvogel L, Robbins PF, Clarke MR, Abe R, Davis CG, and Lotze MT. B7.1 costimulation markedly enhances IL-12 mediated antitumor immunity *in vivo*. Eur Jl Immun.26:1335-1341, 1996.

256. Berman RM, Suzuki T, Tahara H, Narula SK, Robbins PD, Lotze MT. Systemic administration of cellular Interleukin-10 (cIL-10) induces an effective, specific and long-lived immune response against established tumors in mice. J Immunology 157:231-238, 1996.

257. Maeurer MJ, Martin DM, Storkus WJ, Lotze MT. Evidence for shared T-cell receptor usage in cytolytic T-cells recognizing HLA-A2 presented antigens shared by melanoma and melanocytes. Immunology Today 16:603-4, 1995.

258. Maeurer MJ, Martin DM,Walter W, Liu Kaihong, Zitvogel L, Haluszczak C, Rabinowich H, Duquesnoy R, Storkus WJ, Lotze MT. Vä1+ T-lymphocytes obtained from colorectal cancer patients recognize tumor cells of epithelial origin. J. Exp. Med, 183:1681-96, 1996.

259. Lotze MT. Cytokines and the Treatment of Cancer (Chapter 199; pp199.1-199.25). The Handbook of Experimental Immunology, 5th Edition, Ed Weir, Herzenberg, Herzenberg, and Blackwell. Blackwell Science, Inc.; Cambridge, MA; 1996.

260. Mayordomo JI, Loftus DJ, Sakamoto H, Lotze MT, Storkus WJ, Appella E, DeLeo AB. Therapy of murine tumors with dendritic cells pulsed with p53 wild type and mutant sequence peptides. J Exp Med 183:1357-1365, 1996.

261. Farhood H, Storkus WJ, Lotze MT. IL-12 and IL-2 synergistically induce IL-10 mRNA and protein in activated human lymphocytes. Annals of the New York Academy of Sciences 1996;795.

262. Tahara H, Zitvogel L, Storkus WJ, Robbins PD, Lotze MT. Murine models of cancer cytokine gene therapy using IL-12. Annals of the New York Academy of Sciences 1996;795:275-283.

263. Zitvogel L, Mayordomo JI, Storkus WJ, Tahara H, Robbins PD, Finn O, Lotze MT. Specific active immunotherapy for breast carcinoma: genetically modified tumor vaccines and peptide pulsed dendritic cell-based adoptive therapy. Preclinical studies and clinical trials. Colloquim - Scandinavian Breast Group; October 11-14, 1995; Published by Bristol Myers Squibb.

264. Dookeran KA, Lotze MT, Sikora SS, Rao UNM. Pancreatic and periampullary carcinomas with epididymo-orchicdic metastases. British Journal of Surgery 84:198-199, 1997.

265. Falo LD, Lotze MT. Cancer Vaccines, in Manual of Clinical Laboratory Immunology; 5th Edition. Chapter 133. Volume Editor: Everly Conway de Macario; Section Editor T. Whiteside. American Society for Microbiology Press, 1997.

266. Tzeng E, Shears LL, Lotze MT, Billiar TR. Gene Therapy. Current Prob. in Surgery 33:961-1052, 1996.

267. Wasserman K, Rosenstein MM, Lotze MT. Regression of established tumors by combined systemic administration of Interleukin 12 and local irradiation. Unpublished.

268. Galon J, Gauchat J-F, Villiers C, Mazieres N, Spagnoli R, Storkus W, Lotze MT, Bonnefoy J-Y, Fridman WH, Sautes C. Soluble Fcã receptors bind to CR3 (CD11b/CD18) and CR4 (CD11c/CD18) complement receptors. J Immunology 157:1184-92, 1996.

269. Maeurer MJ, Martin DM, Gollin S, Castelli C, Swaney W, Robbins PD, Storkus WJ, Lotze MT. Recurrent melanoma exhibiting downregulation of the peptide transporter protein, TAP-1 and antigen-loss of the immunodominant antigen MART-1/Melan-A recognized by CD8+ cytotoxic T-lymphocytes. Journal of Clinical Investigation 98:1633-41, 1996.

270. Dumanian G, Llull R, Ramasastry S, Lotze MT, Greco R, Edington H. Abodominal wall dehiscence with enterocutaneous fistula: Management with split thickness skin grafts.American Journal of Surgery 172:332-4, 1996.

271. Rubin JT, Brumfield A, Dookeran KA, Lotze MT. Oil-based , sustained-release cytokine preparations: vehicles for regional therapy of cancer and tumor. Unpublished.

272. Rubin JT, Brumfield A, Dookeran K, and Lotze MT. Oil-based, sustained-release interleukin-2: a vehicle for regional therapy of cancer and tumor vaccines. Unpublished.

273. Mertz PM, Corcoran ML, McCluskey KM, Zhang Y, Wong HL, Lotze MT, DeWitt DL, Wahl SM, Wahl LM.Suppression of prostaglandin H synthase-2 induction in human monocytes by *in vitro* or *in vivo* administration of interleukin 4. Cellular Immunology 173:252-260, 1996.

274. Dookeran KA, Lotze MT, Brumfield A, Rubin JT. Generation of multiple hepatic metastases in a rat tumour model. Unpublished.

275. Zitvogel L, Corey S, Tim, Maeurer MJ, Couderc B, Rybak ME, Lotze MT, Donnenberg A. Interleukin-4-induced apoptosis of a ãä-T-cell leukemia: preclinical studies and *in vivo* application. Unpublished.

276. Goydos JS, Brumfield AM, Frezza E, Booth A, Lotze MT, Carty SE. Marked elevations in serum IL-6 levels in patients with cholangiocarcinoma. Annals of Surgery 227:398-404, 1998.

277. Goydos JS, Finn OJ, Lotze MT. A phase I trial of a synthetic mucin peptide vaccine. Induction of specific immune reactivity in patients with adenocarcinoma. J Surg Res 63:298-304, 1996.

278. Leder GH, Oppenheim M, Rosenstein M, Hoffman R, Lotze MT, Beger HG. NO fördert Tumorwachstum durch Lymphozytensuppression - Versuchs *in vivo* (NO supports tumor growth by suppression of lymphocytes - experiments *in vivo*. Unpublished.

279. Maeurer MJ, Lotze MT. Immune Responses to Melanoma Antigens. Chapter 32 (pp517-534) In Balch Charles M., Houghton Alan N., Sober Arthur J., Soong Seng-jaw. Cutaneous Melanoma, 3rd edition, Quality Medical Publishing, Inc. St. Louis, MO; 1998

280. Margolin K, Atkins M, Sparano J, Sosman J, Weiss G, Lotze M, Doroshow J, Mier J, O=Boyle K, Fisher R, Campbell E, Rubin J, Federighi D, Bursten S. Prospective randomized trial of lisofylline for the prevention of toxicities of high-dose interleukin-2 therapy in advanced renal cancer and malignant melanoma. Clinical Cancer Research 3:565-572, 1997.

281. Mayordomo JI, Zitvogel L, Tjandrawan T, Lotze MT, Storkus WJ. Dendritic cells presenting tumor peptide epitopes stimulate effective anti-tumor CTL *in vitro* and *in vivo*.In Immunology of Human Melanoma (Series: Biomedical and Health Research 12 (1996)), pp. 153-163.

282. Vokes EE, Figlin R, Hochster H, Lotze M, Rybak ME. A Phase II study of recombinant human interleukin 4 for advanced or recurrent non-small lung cancer. The Cancer Journal from Scientific American 4:46-51, 1998.

283. Atkins MB, Robertson MJ, Gordon M, Lotze MT, DeCoste M, DuBois JS, Ritz J, Sandler AB, Edington HD, Garzone PD, Mier JW, Canning CM, Battiato L, Tahara H, Sherman ML. Phase I Evaluation of intravenous recombinant human interleukin-12 (rhIL-12) in patients with advanced malignancies. Clinical Cancer Research 1997 Mar; 3:409-417.

284. Tjandrawan T, Martin DM, Maeurer MJ, Castelli C, Lotze MT, Storkus WJ. Autologous human dendriphages pulsed with synthetic or natural tumor peptides elicit tumor-specific CTLs *in vitro*. J Immunother 21:149-157, 1998.

285. Shurin MR, Panharipande PP, Lotze MT. FLT3 receptor and ligand: Biology and potential clinical application. Unpublished.

286. Lotze MT. Introduction. Interleukin 12: Cellular and Molecular Immunology of an Important Regulatory Cytokine. NYAS 795:xiii-xix, 1996. Ed. Michael T. Lotze, Giorgio Trinchieri, Maurice K. Gately, and Stanley F. Wolf. New York Academy of Sciences, NY.

287. Lotze MT. Biology of Cancer Metastases: Lymphatic Dissemination. In Regional Therapy of Advanced Cancer, Ed. Lotze MT, Rubin JT; JB Lippincott, Philadelphia, 1996.

288. Maeurer MJ, Walter W, Martin D, Zitvogel L, Elder E, Storkus W, Lotze MT. Interleukin-7 (IL-7) in colorectal cancer: IL-7 is produced by cultured colorectal cancer cells and tissues from colorectal cancer. Scandinavian J Immunology,45:182-192, 1997.

289. Lotze MT,Zitvogel L, Campbell R, Robbins PD, Elder EM, Haluszczak C, Martin D, Whiteside TL, Storkus WJ, and Tahara H. Cancer Gene Therapy Using IL-12. NYAS 795:440-454, 1996. In Interleukin 12: Cellular and Molecular Immunology of an Important Regulatory Cytokine. Ed. Michael T. Lotze, Giorgio Trinchieri, Maurice K. Gately, and Stanley F. Wolf. New York Academy of Sciences, NY.

290. Kim SH, Ahn JS, Tahara H, Lotze MT, Robbins PD, Kim S. Retroviral-mediated IL-12 gene therapy for advanced murine tumors: Implications for the immunotherapy of cancer. Unpublished.

291. Shurin MR, Pandharipande PP, Zorina TD, Haluszczak C, Subbotin VM, Hunter O, Brumfield A, Storkus W, Lotze MT. FLT3-Ligand-induced generation of functionally active dendritic cells in mice. Cellular Immunology 179:174-184, 1997.

292. Mayordomo JI, Zorina T, Storkus WJ, DeLeo AB, Zitvogel L, Lotze MT. Bone marrow-derived DCs serve as potent adjuvants for peptide-based antitumor vaccines. Stem Cells, 15:94-103, 1997.

293. Sikora SS, Kinzler D, Lotze MT. Peripheral nerve entrapment: an unusual adverse event with high-dose IL-2 therapy. Ann. Oncol 7:535, 1996.

294. Lotze MT, Shurin M, Davis I, Amoscato A, Storkus WJ. Dendritic cell based therapy of cancer. Adv Exp Med Biol 1997; 417:551-569.

295. Maeurer MJ, Lotze MT. Interleukin-7 (IL-7) knock out mice. Implications for lymphopoiesis and organ-specific immunity. International Reviews of Immunology 1998;16(3-4):309-322.

296. Wilson Cara C, Tueting T, Ma DI, Haluszczak C, Lotze M, Storkus W. Activation of dendritic cells by surrogate T cell interactions leads to enhanced costimulation, secretion of TH1-associated cytokines, and CTL inductive capacity. In Procedings of the IV International Symposium on Dendritic Cells in Fundamental and Clinical Immunology (Vol 3). Ed. Paola Ricciardi-Castagnoli, Plenum Press, New York.

297. Bernhard H, Maeurer MJ, Jäger E, Wölfel, Schneider J, Karbach J, Seliger B, Huber C, Storkus WJ, Lotze MT, Meyer zum Büschenfelde K.-H., Knuth A. Recognition of human renal cell carcinoma and melanoma by HLA-A2-restricted cytotoxic T lymphocytes is mediated by shared peptide epitopes and up-regulated by Interferon-ã. Scand. J. Immunol 44:285-292, 1996.

298. Tuting T, Zorina T, Ma DI, Wilson CC, De Cesare CM, De Leo AB, Lotze MT, Storkus WJ. Development of dendritic cell-based genetic vaccines for cancer. Adv Exp Med Biol 1997;417:511-518.

299. Myers JN, Mank-Seymour A, Storkus W, Johnson CS, Lotze MT. SCCVII, a murine squamous cell carcinoma cell line that is a useful model for immunotherapy, Unpublished.

300. Myers JN, Mank-Seymour A, Zitvogel L, Storkus W, Clarke M, Johnson CS, Tahara H, Lotze MT. Interleukin-12 gene therapy prevents establishment of SCCVII squamous cell carcinomas, inhibits tumor growth, and elicits long term anti-tumor immunity in syngeneic C3H mice. Laryngoscope 108:261-268, 1998.

301. Couderc B, Zitvogel L, Doulin-Echinard V, Djennane L,Tahara H, Favre G, Lotze MT, Robbins PD. Enhancement of antitumor immunity by expression of CD70 (CD27L) or CD154(CD40L) costimulatory molecules on tumor cells.Cancer Gene Therapy 5:163-175, 1998.

302. Lotze MT, Zola H. CD30 Panel Report. Leucocyte Typing V: 6th International Human Leucocyte Differentiation Antigen Workshop Proceedings

303. Zitvogel L, Couderc B, Mayordomo JI, Robbins PD, Lotze MT, Storkus WJ. IL-12-engineered dendritic cells serve as effective tumor vaccine adjuvants *in vivo*. NYAS 795:284-293, 1996. In Interleukin 12: Cellular and Molecular Immunology of an Important Regulatory Cytokine. Ed. Michael T. Lotze, Giorgio Trinchieri, Maurice K. Gately, and Stanley F. Wolf. New York Academy of Sciences, NY.

304. Edington H, Lotze MT. Interleukin 7. Chapter 9; pp169-185 in The Cytokine Handbook, Second Edition; Editor, A. Thomson, Academic Press, Ltd; London; 1994.

305. Davis ID, Tahara H, Lotze MT. Cytokine Gene Therapy. in The Cytokine Handbook, Third Edition; Editor, A. Thomson, Academic Press, Ltd; London; 1998.

306 Tüting T, Storkus WJ, Lotze MT. Gene-based strategies for the immunotherapy of cancer. Molecular Medicine 75:478-491, 1997.

307. Zitvogel L, Le Cesne A, Cordier L, Lotze MT, Escudier B, Haddada H, Tursz T, Kourilsky F. specific active immunotherapy for cancer:Gene or dendritic cell-based tumor vaccines. In Sourcebook on Asbestos Diseases (Volume 13). George A and Barbara J. Peters, Eds.; The Michie Company/Butterworth and Company, Publishers, Inc.Borough Green, UK; 1996.

308. Goldman SA, Baker E, Weyent RJ, Clarke MR, Myers J, Lotze MT. Peritumoral CD1a-positive dendritic cells are associated with survival, recurrence and tumor stage in oral tongue squamous cell carcinoma. Archives of Otolaryngology Head and Neck Surgery 124:641-6, 1998..

309. Evans CH, Robbins PD, Ghivizzani SC, Herndon JH, Kang R, Bahnson AB, Barranger JA, Elder EM, Gay S, Tomaino MM, Wasko MC, Watkins SC, Whiteside TL, Glorioso JC, Lotze MT, Wright TM. Clinical trial to assess the safety, feasibility, and efficacy of transferring a potentially anti-arthritic cytokine gene to human joints with rheumatoid arthritis. Human Gene Therapy 7:1261-80, 1996.

310. Tüting T, DeLeo AB, Lotze MT, Storkus WJ. Genetically modified bone marrow-derived dendritic cells expressing tumor-associated viral or "self" antigens induce antitumor immunity *in vivo*. Eur. J. Immunology 27:2702-2707, 1997.

311. Tahara H, Kitagawa T, Iwazawa T, Lotze MT. Chapter 6. Gene transfection using particle bombardment. In Gene Therapy, Principles and Applications, Ed. Thomas Blankenstein. Birkhäuser Publishing Ltd.; pp93-102; Basel, Switzerland; 1999.

312. Maeurer MJ, Chan JH-W, Karbach J, Salter RD, Knuth A, Lotze MT, Storkus WJ. Amino acid substitution at position 97 in HLA-A2 segregate cytolysis from cytokine release in MART-1/Melan-A peptide AAGIGILTV-specific cytotoxic T lymphocytes. Eur. J. Immunol. 26:2613-2623, 1996.

313. Maeurer MJ, Edington H, Lotze MT. Interleukin 7. in The Cytokine Handbook, Third Edition; Editor, A. Thomson, Academic Press, Ltd; London;1999.

314. Lotze MT. Getting to the Source: Dendritic Cells as Therapeutic Reagents For The Treatment of Cancer Patients (Editorial). Annals of Surgery 226:1-5, 1997.

315. Tüting T, Baar J, Gambotto A, Davis ID, Storkus WJ, Zavodny P, Narula S, Tahara H, Robbins PD, Lotze MT. Interferon alpha gene therapy for cancer: retroviral transduction of fibroblasts and particle-mediated transfection of tumor cells are equally effective strategies for gene delivery in murine tumor models. Gene Therapy 4:1053-1060, 1997.

316. Shurin MR, Esche C, Peron J-M, Lotze MT. Anti-tumor activities of Interleukin-12 and mechanisms of action. Chemical Immunology 68:153-174, 1997.

317. Baar J, Lotze MT. Interferon-ã-inducible cytokine expression in plasmid transfected dendritic cells. Submitted for publication.

318. Vu HN, Jenkins FJ, Swerdlow SH, Locker J, Lotze MT. Pleural effusion as the presentation for primary effusion lymphoma. Surgery 123:589-591, 1998.

319. Amoscato AA, Prenowitz DA, Lotze MT. Rapid extracellular degradation of synthetic Class I peptides by human dendritic cells. J Immunology, 1998;161.

320. Tüting T, Wilson CC, Martin DM, Kasamon YL, Rowles J, Ma DI, Slingluff CL, Wagner SN, van der Bruggen P, Baar J, Lotze MT, Storkus WJ. Autologous human monocyte-derived dendritic cells genetically modifed to express melanoma antigens elicit primary cytotoxic T cell response *in vitro*: Enhancement by cotransfection of genes encoding the Th1-biasing cytokines IL-12 and IFN-á. J Immunol 1998;160:1139-1147.

321. Rosenberg SA, Blaese RM, Brenner MK, Deisseroth AB, Ledley FD, Lotze MT, Wilson JM, Nabel GJ, Cornetta K, Economou JS, Freeman SM, Riddell SR, Oldfield E, Gansbacher B, Dunbar C, Culver K, Heslop HE, Simons J, Wilmott RW, Tiberghien P, et al. Human gene marker/therapy clinical protocols. Human Gene Therapy 1996;7:2287-313.

322. Iwazawa, Chau G-Y, Mori T, Dookeran KA, Rubin JT, Watkins S, Robbins PD, Lotze MT, Tahara H. Potent antitumor effects of intra-arterial injection of fibroblasts genetically engineered to express IL-12 in liver metastasis model of rat: no additional benefit of using retroviral producer cell. Cancer Gene Ther 2001 Jan;8(1):17-22.

323. Gambotto A, Tüting T, McVey DL, Kovesdi I, Tahara H, Lotze MT, Robbins PD. Induction of anti-tumor immunity by direct intra-tumoral injection of a recombinant adenovirus vector expressing Interleukin 12. Cancer Gene Therapy 1999;6(1):45-53.

324. Antonysamy M, Lotze MT, Tahara H, Thomson A. Interleukins 16, 17, and 18 in The Cytokine Handbook, Third Edition; Editor, A. Thomson, Academic Press, Ltd; London;1999.

325. Osaki T, Péron J-M, Cai Q, Okamura H, Robbins PD, Kurimoto M, Lotze MT, Tahara H. Interferon-γ-inducing factor/Interleukin 18 Administration Mediates Interleukin 12 and Interferon-γ Independent Anti-tumor Effects. J Immunology 160:1742-1749, 1998.

326. Baar J, Storkus WJ, Lotze MT. Dendritic cells are potent mediators of tumour rejection. In Ciba-Geigy Bench-to-Bedside Series.

327. Storkus WJ, Tahara H, Lotze MT. Interleukin 12. In The Cytokine Handbook, Third Edition; Editor, A. Thomson, Academic Press, Ltd; London;1999.

328. Lotze MT. Future Directions for rIL-2 in Cancer: A Chronic Inflammatory Disorder. The Cancer Journal from Scientific American, 3:S106-109, 1997.

329. Lotze M, Hellerstedt B, Stolinski L, Tueting T, Wilson C, Storkus W, Tahara H, Kinzler D, Vu H, Rubin JT, Whiteside T, Elder E. Interleukin-2 (IL-2)and the role of dendritic cells (DCs) for cancer therapy. The Cancer Journal from Scientific American 3:S109-114, 1997.

330. Maeurer MJ, Lotze MT. Tumor recognition by the cellular immune system: new aspects of tumor immunology. International Reviews of Immunology 14:97-132, 1997.

331. Péron J.-M., Subbotin V, Esche C. Lotze MT, Shurin MR. Effective treatment of murine liver metastases: role of NK cells. Journal of Immunology 1998;161(11):6164-6170.

332. Doulin-Echinard V, Robbins PD, Lotze MT, Favre G, Couderc B. Enhancement of anti-tumor immunity by injection of fibroblasts genetically engineered to produce IL-12 and express CD70. Advances in Experimental Medicine and Biology 1998;451:353-357.

333. Fernandez Nadine, Duffour M-T, Perricaudet M, Lotze MT, Tursz T, Zitvogel L. Active specific immunotherapy for cancer: nucleic acids, peptides, whole native proteins, recombinant viruses, with dendritic cell adjuvants or whole tumor cell-based vaccines. Principles and future prospects. Cytokines and Molecular Therapy 4:53-66, 1998.

334. Dutcher JP, Atkins M, Fisher R, Weiss G, Margolin K, Aronson F, Sosman J, Lotze M, Gordon M, Logan T, Mier J. Interleukin-2-based therapy for metastatic renal cell cancer: The Cytokine Working Group experience, 1989-1997; Cancer Journal from Scientific American, 3:S73-78, 1997.

335. Robertson MJ, Cameron C, Atkins MB, Gordon MS, Lotze MT, Sherman M, Ritz J. Immunologic effects of Interleukin-12 administered as a bolus intravenous injection to patients with cancer. Clin Cancer Res 5:9-16, 1999.

337. Shurin MR, Esche C, Lotze MT. FLT3: Receptor and ligand. Biology and potential clinical application. Cytokine Growth Factor Rev 1998 Mar;9(1):37-48.

336. Okada H, Tahara H, Shurin MR, Attanucci J, Giezeman-Smits KM, Fellows WK, Lotze MT, Chambers WH, Bozik ME. Bone marrow-derived dendritic cells pulsed with a tumor-specific peptide elicit effective anti-tumor immunity against intracranial neoplasms. Int J Cancer 1998 Oct 5;78(2):196-201.

338. Farhood H, Campbell R, Shurin G, Hershberger P, Barksdale E, Watkins S, Lotze MT. Ubiquitous intracellular fas ligand expression in human and mouse tumor and normal cells. Unpublished.

339. Nishioka Y, Hirao M, Robbins PD, Lotze MT, Tahara H. Delivering Antigen Presenting Cells to the Site of Tumor Antigen: Induction of systemic and therapeutic antitumor immunity using intratumoral injection of dendritic cells genetically engineered to express Interleukin-12 (IL-12). Cancer Research 1999;59(16):4035-4041.

340. Shurin MR, Lokshin A, Shurin GV, Subbotin V, Hershberger P, Watkins SC, Esche C, Lotze MT. Tumors induce apoptosis of dendritic cells: another counterattack. Unpublished.

341. Maeurer MJ, Lotze MT. Interleukin-7 (IL-7) knockout mice. Implications for lyphopoiesis and organ-specific immunity. Intern. Rev. Immunol. 16:309-322, 1998.

342. Atkins MB, Lotze MT, Dutcher JP, Fisher R, Weiss G, Margolin K, Abrams J, Sznol M, Parkinson D, Hawkins M, Paradise C, Kunkel L, Rosenberg SA. High-dose recombinant interleukin-2 therapy for patients with metastatic melanoma: analysis of 270 patients treated from 1985-1993. Journal of Clinical Oncology 1999;17(7):2105.

343. Esche C, Subbotin VM, Hunter O, Wahl M, Peron M-M, Maliszewski C, Lotze MT, Shurin MR. Differential regulation of epidermal and dermal dendritic cells by IL-12 and Flt3 ligand. Journal of Investigative Dermatology 1999;113:1028-1032.

344. Finn OJ, Lotze MT. Third Keystone Symposium on Cellular Immunology and the Immunotherapy of Cancer. Introduction. J Immunother 21:114-118, 1998.

345. Lotze Michael T., Farhood Hassan, Wilson Cara C., Storkus Walter J. Section. V. DC Based Therapies; Chapter 25. Dendritic Cell Therapy of Cancer and HIV Infection in Dendritic Cells, edited by Lotze MT and Thomson A. Academic Press, London. 1998.

346. Wilson CC, Olson WC, Tüting T, Rinaldo CR, Lotze MT, Storkus WJ. HIV-1 specific cytotoxic T-cell responses primed *in vitro* by blood derived dendritic cells and Th1-biasing cytokines. Journal of Immunology 1999;162(5):3070-3078.

347. Berman RM, Tahara H, Lotze MT. Viral Interleukin-10 (vIL-10), the human herpesvirus-4 (EBV) IL-10 homologue. Submitted

348. Berman RM, Tahara H, Satwant K. Narula, Lotze MT. Cellular mechanisms of anti-tumor immunity and immune memory generated by systemic administration of interleukin-10 to tumor-bearing mice. Submitted.

349. Campbell RL, Wright SE, Repasky EA, Watkins SC, Lotze MT. Early polar spectrin aggregation and uropod formation in CD45RA+ T-cell during primary activation by DCs. Submitted.

350. Lotze MT, Jaffe R. Section. IV. Dendritic Cells and Disease; Chapter 19. Cancer; In Dendritic Cells, edited by Lotze MT and Thomson A. Academic Press, London. 1998.

351. Esche C, Gambotto, A, Satoh Y, Gerein V, Robbins PD, Watkins SC, Lotze MT, Shurin MR. CD154 (CD40L) inhibits tumor-induced apoptosis in DCs and tumor growth. European Journal of Immunology 1999;29(7):2148-2155.

353. Satoh Y, Gambatto A, Esche C, Todo S, Lotze MT, Shurin MR. Dendritic cell-based IL-12 gene therapy in a model of colorectal cancer-derived hepatic metastases.. J Exp Ther Oncol 2002 Nov-Dec;2(6):337-49

354. Chikamatsu K, Nakano K, Storkus WJ, Appella E, Lotze MT, Whiteside TL, DeLeo AB. Generation of anti-p53 cytotoxic T lymphocytes from human peripheral blood using autologous dendritic cells. Clinical Cancer Research 1999;5(6):1281-1288.

355. Hashimoto W, Osaki T, Okamura H, Robbins PD, Kurimoto M, Nagata S, Lotze MT, Tahara H. Differential antitumor effects of administration of recombinant interleukin 18 (rIL-18) or rIL-12 are mediated by Fas-Fas ligand and perforin-induced tumor apoptosis, respectively. Journal of Immunology 1999;163(2):583-589.

356. Martincic K, Campbell R, Edwalds-Gilbert G, Souan L, Lotze MT, Milcarek C. Increase in the 64 kDa subunit of the polyadenylation/cleavage stimulatory factor (CstF-64) during the G0 to S-phase transition. PNAS 95:11095-11100, 1998.

357. Chi KH, Myers JN, Chow KC, Chan WK, Tsang YW, Chao Y, Yen SH, Lotze MT. Phase II trial of systemic recombinant IL-2 in the treatment of refractory nasopharyngeal carcinoma. Oncology 2001;60(2):110-5.

358. Peron JM, Esche C, Subbotin VM, Maliszewski C, Lotze MT, Shurin MR. FLT3-ligand administration inhibits liver metastases: role of NK cells. J Immunol 1998 Dec 1;161(11):6164-70.

359. Rao UN, Hanan SH, Lotze MT, Karakousis CP. Distant skin and soft tissue metastases from sarcomas. J Surg Oncol 1998 Oct;69(2):94-8.

360. Okada H, Attanucci J, Giezeman-Smits KM, Brissette-Storkus C, Fellows WK, Gambotto A, Pollack LF, Pogue-Geile K, Lotze MT, Bozik ME, Chambers WH. Immunization with an antigen identified by cytokine tumor vaccine-assisted SEREX (CAS) suppressed growth of the rat 9L glioma in vivo. Cancer Res 2001 Mar 15;61(6):2625-31

361. Giezeman-Smits KM, Okada H, Brisette-Storkus C, Villa LA, Attanucci J, Lotze MT, Pollack IF, Bozik ME, Chambers WH. Cytokine gene therapy of gliomas: induction of reactive CD4+ T

cells by interleukin-4-transfected 9L gliosarcoma is essential for protective immunity. Cancer Res. 2000 May 1;60(9):2449-57.

362. McMasters KM, Sondak VK, Lotze MT, Ross MI. Recent advances in melanoma staging and therapy. Ann. Surg. Onc. 1999;6(5):467-475.

363. Campbell RL, Wright SE, Repasky EA, Watkins SC and Lotze MT. Specrin aggregation correlates with uropod formation: requirement for myosin motor activity and actin polymerization. Submitted.

364. Tahara H, Elder EM, Zitvogel LM, Storkus WJ, Robbins PD, Cai Q, Kinzler DM, Kirkwood J, Whiteside T, Lotze MT. Interleukin 12 (IL-12) gene therapy using direct injection of tumors with genetically engineered autologous fibroblasts: A Phase I Clinical Trial; submitted NEJM/

365. Shurin GV, Lotze MT, Barksdale EM. Human neuroblastoma cells induce apoptosis of T-cells: I. Role of FasL. *Nat Immun* 1998;16(5-6):263-74.

366. Zitvogel L, Tahara H, Mayordomo JI, Storkus WJ, Robbins PD, Elder EM, Whiteside TL, Lotze MT. Specific active immunottherapy for cancer: gene or dendritic cell-based tumor vaccines. Preclinical studies and clinical trials. In The Biotherapy of Cancers: From immunotherapy to gene therapy. Ed. S. Chouaib; Les Editions, INSERM, Paris, 1998 pp 475-490.

367. Odoux C, Lotze MT, Siegfried JM, Luketich JD, Weigel TL. Paclitaxel induces apoptotic death and activates caspase-3 in human lung cancer: is it really Fas dependent? Submitted for publication.

368. Takayama T, Nishioka Y, Lu L, Lotze MT, Tahara H, Thomson AW. Retroviral delivery of viral interleukin-10 into myeloid dendritic cells markedly inhibits their allostimulatory activity and promotes the induction of T-cell hyporesponsiveness.Transplantation 1998 Dec 27;66(12):1567-74.

369. Hirao M, Nishioka Y, Watkins SC, Robbins PD, Lotze MT, Tahara H. Tumor specific cellular immune response induced with intratumoral injection of immature dendritic cells, submitted.

370. Okada H, Giezeman-Smits KM, Tahara H, Attanucci J, Fellows WK, Lotze MT, Chambers WH, ME. Effective cytokine gene therapy against an intracranial glioma using a retrovirally transduced IL-4 plus HSVtk tumor vaccine. Gene Therapy 1999;6(2):219-226.

371. Okada H, Lotze MT. Interleukin 4: Clinical Applications in Rosenberg SA Principles and Practice of the Biologic Therapy of Cancer; 3rd Edition. pp93-103; Lippincott Williams Wilkins, Philadelphia; 2000.

372. Amoscato AA, Matsko CM, Rabinowich H, Lotze MT. Mitochondrial phosphatidylglycerol cardiolipin and ceramide alterations occur as very early events during T-cell apoptosis. Submitted.

373. Rosenberg SA, Blaese RM, Brenner MK, Deisseroth AB, Ledley FD, Lotze MT, Wilson JM, Nabel GJ, Cornetta K, Economou JS, Freeman SM, Riddell SR, Oldfield E, Gansbacher B,

Dunbar C, Walter RE, Schuening FG, Roth JA, Crystal RG, Welsh MJ, Culver K, Keslop HE, Simons J, Wilmott RW, Habib NA. Human gene marker/therapy clinical protocols. Human Gene Therapy 1999;10(18):3067-3123.

374. Osaki T, Hashimoto W, Gambotto A, Okamura H, Robbins PD, Kurimoto M, Lotze MT, Tahara H. Potent antitumor effects mediated by local expression of the mature form of the interferon-gamma inducing factor, interleukin-18 (IL-18). Gene Therapy 1999;6(5):808-815.

375. Lotze MT. In Vivo Veritas. Clinical Immunology 1999;93(1):1-4.

376. Ohm JE, Shurin MR, Esche C, Lotze MT, Carbone DP, Gabrilovich DI. Effect of vascular endothelial growth factor and FLT3 ligand on dendritic cell generation *in vivo*. Journal of Immunology 199;163(6):3260-3268.

377. Esche C, Lokshin A, Shurin GV, Gastman BR, Rabinowich H, Watkins SC, Lotze MT, Shurin MR. Tumor's other immune targets: dendritic cells. Journal of Leukocyte Biology 1999;66(2):336-344.

378. Lotze MT. Not just an antigen-presenting cell: 5th international symposium on dendritic cells in fundamental and clinical immunology. Journal of Leukocyte Biology 1999;66(2):195-200.

379. Tuting T, Gambotto A, DeLeo A, Lotze MT, Robbins PD, Storkus WJ. Induction of tumor antigen-specific immunity using plasmid DNA immunization in mice. Cancer Gene Therapy 1999;6(1):73-80.

380. Thomas RL, Lotze MT, Amoscato AA. Qualitative whole cell lipid analysis of neoplastic cell lines via electrospray ionization tandem mass spectrometry. Submitted for publication.

381. Esche C, Makarenkova VP, Kost NV, Lotze MT, Zozulya AA, Shurin MR. Murine dendritic cells express functional delta-type opioid receptors. Annals of the New York Academy of Sciences 1999;885:387-390.

384. Shurin MR, Lu L, Kalinski P, Stewart-Akers AM, Lotze MT. Th1/Th2 balance in cancer, transplantation and pregnancy. Springer Semin Immunopathol. 1999;21(3):339-59.

382. Hiroishi K, Tuting T, Tahara H, Lotze MT Interferon-alpha gene therapy in combination with CD80 transduction reduces tumorigenicity and growth of established tumor in poorly immunogenic tumor models. Gene Ther. 1999 Dec;6(12):1988-94.

385. Rosenberg SA, Blaese RM, Brenner MK, Deisseroth AB, Ledley FD, Lotze MT, Wilson JM, Nabel GJ, Cornetta K, Economou JS, Freeman SM, Riddell SR, Oldfield E, Gansbacher B, Dunbar C, Walker RE, Schuening FG, Roth JA, Crystal RG, Welsh MJ, Culver K, Heslop HE, Simons J, Wilmott RW, Habib NA, et al. Human gene marker/therapy clinical protocols. Hum Gene Ther. 1999 Dec 10;10(18):3067-123.

386 Esche C, Subbotin VM, Hunter O, Peron JM, Maliszewski C, Lotze MT, Shurin MR. Differential regulation of epidermal and dermal dendritic cells by IL-12 and Flt3 ligand. J Invest

Dermatol. 1999 Dec;113(6):1028-32.

387. Atkins MB, Lotze MT, Dutcher JP, Fisher RI, Weiss G, Margolin K, Abrams J, Sznol M, Parkinson D, Hawkins M, Paradise C, Kunkel L, Rosenberg SA. High-Dose Recombinant Interleukin 2 Therapy for Patients With Metastatic Melanoma: Analysis of 270 Patients Treated Between 1985 and 1993.J Clin Oncol. 1999 Jul;17(7):2105.

388. Thomas RL Jr, Matsko CM, Lotze MT, Amoscato AA Mass spectrometric identification of increased C16 ceramide levels during apoptosis. J Biol Chem. 1999 Oct 22;274(43):30580-8.

389. Osaki T, Hashimoto W, Gambotto A, Okamura H, Robbins PD, Kurimoto M, Lotze MT, Tahara H. Potent antitumor effects mediated by local expression of the mature form of the interferon-gamma inducing factor, interleukin-18 (IL-18).Gene Ther. 1999 May;6(5):808-15.

390. Ohm JE, Shurin MR, Esche C, Lotze MT, Carbone DP, Gabrilovich DI. Effect of vascular endothelial growth factor and FLT3 ligand on dendritic cell generation in vivo.J Immunol. 1999 Sep 15;163(6):3260-8.

391. Nishioka Y, Hirao M, Robbins PD, Lotze MT, Tahara H. Induction of systemic and therapeutic antitumor immunity using intratumoral injection of dendritic cells genetically modified to express interleukin 12. Cancer Res. 1999 Aug 15;59(16):4035-41.

392. Saito T, Dworacki G, Gooding W, Lotze MT, Whiteside TL. Spontaneous apoptosis of CD8+ T lymphocytes in peripheral blood of patients with advanced melanoma. Clinical Cancer Research 6:1351-1364, 2000.

393. Lotze MT Not just an antigen-presenting cell: 5th international symposium on dendritic cells in fundamental and clinical immunology. J Leukoc Biol. 1999 Aug;66(2):195-200.

394. Son YI, Dallal RM, Mailliard RB, Egawa S, Jonak ZL, Lotze MT. Interleukin-18 (IL-18) synergizes with IL-2 to enhance cytotoxicity, interferon-gamma production, and expansion of natural killer cells. Cancer Res 2001 Feb 1;61(3):884-8

395. Weigel TL, Lotze MT, Kim PK, Amoscato AA, Luketich JD, Odoux C. Paclitaxel-induced apoptosis in non-small cell lung cancer cell lines is associated with increased caspase-3 activity. J Thorac Cardiovasc Surg. 2000 Apr;119(4):795-803.

396. Okada H, Pollack IF, Lotze MT, Lunsford LD, Kondziolka D, Lieberman F, Schiff D, Attanucci J, Edington H, Chambers W, Robbins P, Baar J, Kinzler D, Whiteside T, Elder E. Gene therapy of malignant gliomas: a phase I study of IL-4-HSV-TK gene-modified autologous tumor to elicit an immune response. Hum Gene Ther. 2000 Mar 1;11(4):637-53.

397. Lotze MT, Shurin M, Esche C, Tahara H, Storkus W, Kirkwood JM, Whiteside TL, Elder EM, Okada H, Robbins P. Interleukin-2: developing additional cytokine gene therapies using fibroblasts or DCs to enhance tumor immunity. Cancer J Sci Am. 2000 6 Suppl 1:S61-6.

398. Lotze MT. The future role of interleukin-2 in cancer therapy. Cancer J Sci Am. 2000 Feb;6

Suppl 1:S58-60.

399. Hiroishi K, Tuting T, Lotze MT IFN-alpha-expressing tumor cells enhance generation and promotes survival of tumor-specific CTLs. J Immunol. 2000 Jan 15;164(2):567-72

400. Agha-Mohammadi S, Lotze MT. Regulatable systems: applications in gene therapy and replicating viruses. J Clin Invest. 2000 May;105(9):1177-83. Review.

401. Esche C, Shurin MR, Lotze MT. IL-12R. In Cytokines, Ed Oppenheim J et al Academic Press, London; 2000.

402. Esche C, Shurin MR, Lotze MT. IL-12. In Cytokines, Ed Oppenheim J et al Academic Press, London; 2000.

403. Lotze MT, Dallal RM, Kirkwood JM, Flickinger JC. Cutaneous Melanoma. Chapter 42.2. In Principles and Practice of Oncology, Ed. DeVita V, Hellman S, Rosenberg S. Lippincott-Raven Press, Philadelphia; 2001.

405. Dallal RM, Mailliard R, Lotze MT. Dendritic Cell Vaccines. In Principles and Practice of Biologic Therapy, Ed Rosenberg SA; pp 705-721; Lippincott Williams and Wilkins Press, Philadelphia; 2001.

406. Esche C, Shurin MR, Lotze MT. The use of dendritic cells for cancer vaccination. Current Opinion in Molecular Therapeutics 1999;1(1):72-81.

407. Lotze MT, Odoux C, Luketich J. Editorial Comment: Gene Therapy of Lung Cancer: And Miles to Go Before We Reap. In press, Lung Cancer 2000.

408. Dallal RM, Lotze MT. The Dendritic Cell and Human Cancer Vaccines; *Curr Opin Immunol* 2000 Oct;12(5):583-8

409. Tanaka F, Hirao M, Lotze MT. Delivery of dendritic cells to sites of immune reactivity. Clinical Immunology Newsletter 19:128-131, 1999.

410. Agha-Mohammadi S, Lotze MT. Immunomodulation of cancer: potential use of selectively replicating agents. J Clin Invest. 2000 May;105(9):1173-6.

411. Mailliard RB, Lotze MT. Dendritic Cells Prolong Tumor Specific T-cell Survival and Effector Function after interaction with tumor targets. Clin Cancer Research, Res 2001 Mar;7(3 Suppl):980s-988s

412. Tahara H, Lotze MT. Interleukin 12: Clinical Applications. in Rosenberg SA Principles and Practice of the Biologic Therapy of Cancer; 3rd Edition. pp103-112; Lippincott Williams Wilkins, Philadelphia; 2000.

413. Kikly K, Lotze MT. DCs and wound healing. In Lotze MT and Thomson AW. Dendritic Cells, 2nd Edition. Academic Press, London; 2001 (in press).

414. Mailliard RB, Dallal RM, Son YI, Lotze MT. Dendritic cells promote T-cell survival or death

depending upon their maturation state and presentation of antigen. Immunol Invest. 2000 May;29(2):177-85.

415. Ranieri E, Kierstead LS, Zarour H, Kirkwood JM, Lotze MT, Whiteside T, Storkus WJ. Dendritic cell/peptide cancer vaccines: clinical responsiveness and epitope spreading. Immunol Invest. 2000 May;29(2):121-5.

416. Hirao M, Onai N, Hiroishi K, Watkins SC, Matsushima K, Robbins PD, Lotze MT, Tahara H. CC chemokine receptor-7 on dendritic cells is induced after interaction with apoptotic tumor cells: critical role in migration from the tumor site to draining lymph nodes. Cancer Res. 2000 Apr 15;60(8):2209-17.

417. Rosenberg SA, Blaese RM, Brenner MK, Deisseroth AB, Ledley FD, Lotze MT, Wilson JM, Nabel GJ, Cornetta K, Economou JS, Freeman SM, Riddell SR, Brenner M, Oldfield E, Gansbacher B, Dunbar C, Walker RE, Schuening FG, Roth JA, Crystal RG, Welsh MJ, Culver K, Heslop HE, Simons J, Wilmott RW, Boucher RC. Human gene marker/therapy clinical protocols. Hum Gene Ther. 2000 Apr 10;11(6):919-79.

418. Tanaka F, Hashimoto W, Okamura H, Robbins PD, Lotze MT, Tahara H
Rapid generation of potent and tumor-specific cytotoxic T lymphocytes by interleukin 18 using dendritic cells and natural killer cells. *Cancer Res* 2000 Sep 1;60(17):4838-44

419. Hashimoto W, Tanaka F, Robbins PD, Taniguchi M, Okamura H, Lotze MT, Tahara H. Natural killer, but not natural killer T, cells play a necessary role in the promotion of an innate antitumor response induced by IL-18. Int J Cancer 2003 Feb 1;103(4):508-13

420. Agha-Mohammadi S, Etemad A, Lotze MT. Tet-on or tet-off: Uninduced reverse tTA displays partial affinity for tet operators, limiting efficiency of the Tet-on system. J Biological Chemistry, submitted.

421. Agha-Mohammadi, Lotze MT. Spacially optimized tet-operator positioning allows markedly enhanced efficiency of tet-regulated gene expression. Nature Biotechnology, submitted.

422. Kalinski P, Lotze MT, Kapsenberg ML. Dendritic cell-related immunoregulatory factors. In press, Dendritic Cells; Ed. 2, Academic Press, London; 2001.

423. Davis ID and Lotze MT: Melanoma peptide clinical trials. In: Peptide-based cancer vaccines. Kast WM (ed), Eurekah.com, Austin,TX,USA. 215-236,2000.

424. Eto M, Bennouna J, Hunter OC, Lotze MT, Amoscato AA. Prostate cancer C16 apoptosis associated ceramide (CAAC) accumulates following androgen ablation. Science, submitted.

425. Shurin GV, Lotze MT, Barksdale EM Neuroblastoma inhibits dendritic cell differentiation and function. *Curr Surg* 2000 Nov;57(6):637.

426. Esche C, Cai Q, Peron JM, Hunter O, Subbotin VM, Lotze MT, Shurin MR Interleukin-12 and Flt3 ligand differentially promote dendropoiesis in vivo. *Eur J Immunol* 2000 Sep;30(9):2565-75

427. Dutcher JP, Logan T, Gordon M, Sosman J, Weiss G, Margolin K, Plasse T, Mier J, Lotze M, Clark J, Atkins M. Phase II trial of interleukin 2, interferon alpha, and 5-fluorouracil in metastatic renal cell cancer: a cytokine working group study. *Clin Cancer Res* 2000 Sep;6(9):3442-50.

428. Pirtskhalaishvili G, Shurin GV, Esche C, Cai Q, Salup RR, Bykovskaia SN, Lotze MT, Shurin MR. Cytokine-mediated protection of human dendritic cells from prostate cancer-induced apoptosis is regulated by the Bcl-2 family of proteins. *Br J Cancer* 2000 Aug;83(4):506-13

429. Mailliard R, Egawa S-I, Cai Q, Wankowicz-Kalinska A, Lotze MT, Kapsenberg ML, Storkus WJ, Kalinski WJ. Complementary DC-activating function of $CD8^+$ and $CD4^+$ T cells: Helper role of $CD8^+$ T cells in the development of T Helper Type 1 Responses. J Exp Med. 2002 Feb 18;195(4):473-483.

430. Sanjay Kumar, Charles Hanning, Michael Brigham-Burke, David Rieman, Ruth Lehr, Sanjay Khandekar, Robert Kirkpatrick, Gilbert Scott, John C Lee, Maxine Gowen, Frank Lynch, Michael Lotze Interleukin-1 homologue H4 (IL-1H4/IL-1F7) is processed by caspase-1, binds to the IL-18 receptor but does not induce IFN-γ production. Cytokine 2002 Apr 21;18(2):61-71

431. Okada H, Villa L, Attanucci J, Erff M, Fellows WK, Lotze MT, Pollack IF, Chambers WH Cytokine gene therapy of gliomas: effective induction of therapeutic immunity to intracranial tumors by peripheral immunization with interleukin-4 transduced glioma cells. Gene Ther 2001 Aug;8(15):1157-66.

432. Flaherty LE, Atkins M, Sosman J, Weiss G, Clark JI, Margolin K, Dutcher J, Gordon MS, Lotze M, Mier J, Sorokin P, Fisher RI, Appel C, Du W.Outpatient biochemotherapy with interleukin-2 and interferon alfa-2b in patients with metastatic malignant melanoma: results of two phase II cytokine working group trials. J Clin Oncol 2001 Jul 1;19(13):3194-202

433. Kang WK, Park C, Yoon HL, Kim WS, Yoon SS, Lee MH, Park K, Kim K, Jeong HS, Kim JA, Nam SJ, Yang JH, Son YI, Baek CH, Han J, Ree HJ, Lee ES, Kim SH, Kim DW, Ahn YC, Huh SJ, Choe YH, Lee JH, Park MH, Kong GS, Park EY, Kang YK, Bang YJ, Paik NS, Lee SN, Kim SH, Kim S, Robbins PD, Tahara H, Lotze MT, Park CH. Interleukin 12 gene therapy of cancer by peritumoral injection of transduced autologous fibroblasts: outcome of a phase I study. Hum Gene Ther 2001 Apr 10;12(6):671-84.

434. Dallal RM, Lotze MT. Immunotherapy of metastasis. Surg Oncol Clin N Am 2001 Apr;10(2):433-47, xi.

435. Dworacki G, Meidenbauer N, Kuss I, Hoffmann TK, Gooding W, Lotze M, Whiteside TL. Decreased zeta chain expression and apoptosis in CD3+ peripheral blood T lymphocytes of patients with melanoma. Clin Cancer Res 2001 Mar;7(3 Suppl):947s-957s.

436. Finn OJ, Lotze MT.A decade in the life of tumor immunology. Clin Cancer Res 2001 Mar;7(3 Suppl):759s-760s.

437. Shurin GV, Shurin MR, Bykovskaia S, Shogan J, Lotze MT, Barksdale EM Jr.Neuroblastoma-derived gangliosides inhibit DC generation and function. Cancer Res 2001 Jan 1;61(1):363-9.

438. Uchibayashi N, Robbins PD, Lotze MT, Tahara H. Immature dendritic cells capturing exogenous antigens, generated ex vivo quantitatively from CD34+ blood progenitors cultured with GM-CSF and Flt-3 ligand. Submited for publication (Experimental Hematology).

439. Dallal RM, Christakos P, Lee K, Egawa S, Son Y-I, Lotze MT. Paucity of dendritic cells in pancreatic cancer. Surgery. 2002 Feb;131(2):135-8.

440. Matsko CM, Hunter OC, Rabinowich H, Lotze MT, Amoscato AA. Mitochondrial lipid alterations during fas- and radiation-induced apoptosis.Biochem Biophys Res Commun. 2001 Oct 12;287(5):1112-20.

441. Son YI, Mailliard RB, Watkins SC, Lotze MT.Dendritic cells pulsed with apoptotic squamous cell carcinoma have anti-tumor effects when combined with interleukin-2. Laryngoscope. 2001 Aug;111(8):1472-8.

442. Fujii Si, Shimizu K, Shimizu T, Lotze MT. Interleukin-10 promotes the maintenance of antitumor CD8(+) T-cell effector function in situ. Blood. 2001 Oct 1;98(7):2143-51.

443. Kanto T, Kalinski P, Hunter OC, Lotze MT, Amoscato AA.Ceramide mediates tumor-induced dendritic cell apoptosis. J Immunol. 2001 Oct 1;167(7):3773-84.

444. Shimizu T, Berhanu A, Redlinger RE Jr, Watkins S, Lotze MT, Barksdale EM Jr.Interleukin-12 transduced DCs induce regression of established murine neuroblastoma. J Pediatr Surg. 2001 Aug;36(8):1285-92.

445. Gao W, Kumar S, Lotze MT, Hanning C, Robbins PD, Gambotto A. Innate immunity mediated by the interleukin-1 homologue 4 (IL-1H4/IL-1F7) proinflammatory cytokine induces IL-12 dependent adaptive and profound antitumor immunity. J Immunol 2003 Jan 1;170(1):107-13.

446. Lotze MT, Thomson AW. In the medium is the message: cytokines and dendrikines regulate immune reactivity. Nature Reviews Immunology, in press.

447. Okada H, Lotze MT. Interleukin 4; Chapter 23; Cytokine Handbook 4E. Thomson AW; Lotze MT. Editors. Academic Press, London. 2003.

448. Kalinski P, Storkus WJ, Thomson AW, Lotze MT. Interleukin 12; Cytokine Handbook 4E. Thomson AW; Lotze MT. Editors. Academic Press, London. 2003.

449. Lotze MT, Tahara H, Okamura H. Interleukin-18 as a novel, distinct and distant member of the IL-1 family promoting development of the adaptive immune response. J Immunother. 25:S1-S3, 2002..

450. Jonak ZL, Trulli S, Maier C, McCabe FL, Kirkpatrick R, Johanson K, Ho YS, Elefante L, Chen Y-J, Herzyk D, Lotze MT, Johnson RK High-dose recombinanat Interleukin-18 induces an effective Th1 immune responset to murine MOPC-315 plasmacytoma. J Immunotherapy 25: S20-S27; 2002.

451. Odoux C, Albers A, Amoscato AA, Lotze MT, Wong MK.TRAIL, FasL and a blocking anti-DR5 antibody augment paclitaxel-induced apoptosis in human non-small-cell lung cancer. Int J Cancer 2002 Feb 1;97(4):458-65.

452. Agha-Mohammadi S, Lotze MT. Cytokine gene therapy. In Volume 2, Encyclopedia of Cancer; Elsevier Science, 2002.

453. Shimamura H, Cumberland R, Hiroishi K, Watkins SC, Lotze MT, Baar J.Murine Dendritic Cell-Induced Tumor Apoptosis is Partially Mediated by Nitric Oxide. J Immunother 2002 May-Jun;25(3):226-34.

454. Lotze MT, Kost T. Viruses as Gene Delivery Vectors: Application to Gene Function, Target Validation and Assay Development. Cancer Gene Therapy, in press 2002 9:xxx-xxxx.

455. Lotze MT, Kalinski P. Interleukin 12 Family [IL-12, IL-12RA, IL-23, IL-27]. In , Encyclopedia of Hormones; Elsevier Science, 2003.

456. Lotze MT, Hamilton JA. Macrophage Colony Stimulating Factor [M-CSF]. In Cytokine Handbook, 4th Edition; Ed. Thomson AW, Lotze MT. Academic Press London. 2003

457. Haruki Okamura*, Hiroko Tsutsui, Michael T. Lotze+, Shin-ichiro Kashiwamura, Haruyasu Ueda, Tomohiro Yoshimoto, and Kenji Nakanishi. Interleukin 18 [IL-18] or the Interleukin-1 Family 4 [IL1-F4] Cytokine. In Cytokine Handbook, 4th Edition; Ed. Thomson AW, Lotze MT. Academic Press London. 2003

458. Numasaki M, Fukushi JI, Ono M, Narula SK, Zavodny PJ, Kudo T, Robbins PD, Tahara H, Lotze MT.. Interleukin-17 promotes angiogenesis and tumor growth. Blood. 2002 Oct 31

459. Redlinger RE Jr, Mailliard RB, Lotze MT, Barksdale EM Jr.Synergistic interleukin-18 and low-dose interleukin-2 promote regression of established murine neuroblastoma in vivo. J Pediatr Surg 2003 Mar;38(3):301-7; discussion 301-7.

ABSTRACTS AND PRESENTATIONS

1. Catalano, M.A., Carson, D.A., Lotze, M.T., Lotze, J., Slovin, S., and Vaughan J.H.: Antibodies to Epstein-Barr virus related nuclear antigens in two groups at different risks for rheumatoid arthritis. Clin. Res. 27:322A, 1979.
   Presented: American Assoc. Clin. Res., Washington, D.C. April 1979.

2. Lotze, M.T.: Human T cell cloning.
   Presented: Basel Inst. for Immun., Basel, Switzerland, Sept. 28, 1979.

3. Harvey, J., Lotze, M.T., Arnett, F.C., Bias, W.B., Billingsley, L.M., Harvey, E., Hsu, S., Sutton, J.D., Zizic, T.M., and Stevens, M.B.: Rheumatoid arthritis in a Chippewa population. Clin. Res. 28:147A, 1979.
   Presented: Southeastern Rheumatism Assoc., Greenbriar, West Virginia, Dec. 1, 1979.

4. Lotze, M.T.: Long term culture of human T cells.
   Presented: April 17, 1980; University of Rochester Cancer Center, Rochester, New York.

5. Lotze, M.T.: Cloning of human T cells.
   Presented: Norris Cotton Cancer Center, Dartmouth University, Hannover, New Hampshire, April 24, 1980.

6. Lotze, M.T.: Recent studies with the use of T cell growth factor.
   Presented: Research Institute of Scripps Clinic, La Jolla CA, May 27, 1980.

7. Harvey, J.H., Lotze, M.T., Bias, W.B., Hsu, S., Arnett, F.C., and Stevens, M.B.: Heterogeneity of DRw4 in a Chippewa population. Arth. & Rheum. 23:688, 1980.
   Presented: Amer. Rheum. Assoc., Atlanta, Georgia, May 27, 1980.

8. Lotze, M.T., Strausser, J., and Rosenberg, S.A.: Human T lymphocytes grown in T cell growth factor (TCGF): Cytotoxicity against autologous and allogeneic tumor. Proc. Amer. Assoc. Cancer Res. 21:216, 1980.
   Presented: Amer. Assoc. Cancer Res., San Diego, CA, May 31, 1980.

9. Duncan, M.A., Lotze, M.T., Gerber, L.H.,and Rosenberg,S.A.: Serratus anterior palsy following auxillary dissection: A prospective study. Arch. Phys. Rehab. 61:497, 1980.
   Presented: Amer. Acad. Phys. Med. & Rehab., Washington, D.C., Oct. 21, 1980.

10. Lotze, M.T., Lines, B.T., Strausser, J.L., and Rosenberg, S.A.: Tumor lysis by human T lymphocytes in long term culture and their distribution in vivo:Implications for immunotherapy.
    Presented: Amer. College of Surgeons, Atlanta, Georgia, October 21,1981.

11. Dubois, M., Lotze, M.T., Diamond, W.J., Kim, Y.D., Flye, M.W., and Macnamara, T.E.: Intraoperative acute respiratory failure induced by leucocyte antibodies. Crit. Care Med. 9:195, 1981.
    Presented: World Cong. Intensive & Crit. Care Med.., Washington, D.C., May 24, 1981.

12. Lotze, M.T.: Research in progress: Lymphocyte clones.
Presented: Panel Discussion, Amer. Assoc. Histocompatability Testing, Orlando, Florida,May 24, 1981.

13. Lotze, M.T.: Surgical Perspectives; orders not to resuscitate.
Presented: Panel Discussion: Academy of Medicine, Rochester, New York, March 25, 1982.

14. Lotze, M.T.: An unusual radiologic manifestation of Buerger's Disease.
Presented: Hinshaw Day II; Rochester, New York, May 27, 1982.

15. Lotze, M.T., Marquis, D.M., Carey, A.S., Byer, B.J., Hoy, W.E., and May, A.M.: Two new assays for the early detection of transplant rejection, IL-2 response and PHA-augmented NK activity.
Presented: 3rd International Immunological Monitoring Symposium; Key Biscayne, Florida, November 22, 1982.

16. Lotze. M.T., Robb, R.J., Frana, L.W., Seipp, C.A., Sharrow, S.O., Chang, A.E., and Rosenberg, S.A.: Toxicity, Half life and immune effects of purified Jurkat derived interleukin-2 (IL-2) in patients with cancer and AIDS. J. Cell. Biochem. 8A:13, 1984.
Presented: 13th Annual UCLA Symposium: Acquired Immune Deficiency Syndrome; Park City, Utah, February 10, 1984.

17. Lotze, M.T., Robb, R.J., Frana, L.W., Seipp, C.A., Sharrow, S.O., Chang, A.E., and Rosenberg, S.A.:Systemic administration of Interleukin-2 in patients with cancer and AIDS: Initial results of a Phase I trial. Proc. Amer. Soc. Clin. Onc. 3:51, 1984.
Presented: American Society of Clinical Oncology; Toronto, Ontario.

18. Rayner, A.A., Grimm, E.A., Lotze, M.T., and Rosenberg, S.A.: Activated lymphocyte killing of fresh human tumor: Clonal analysis of a new approach to tumor immunotherapy.
Presented: Society of Surgical Oncology; New York, New York, May 14, 1984.

19. Rayner, A.A., Grimm, E.A., Lotze, M.T., and Rosenberg, S.A.: Demonstration of shared recognition and lysis of autologous and allogeneic fresh human tumors by cloned lymphokine activated killer cells (LAK): Implications for immunotherapy.
Presented: Assoc. for Academic Surgery; San Antonio, Texas, November 3,1984.

20. Lotze, M.T., Frana, L.W., Seipp, C.A., Sharrow, S.O., and Rosenberg,S.A.:Immunologic changes in patients with cancer given interleukin-2 (IL-2) in a Phase I trial.
Presented: Amer. Coll. Surgeons, San Francisco,CA; October, 1984.

21. Rayner, A.A., Grimm, E.A., Lotze, M.T., and Rosenberg, S.A.: Demonstration of shared recognition and lysis of autologous and allogeneic fresh human tumors by cloned lymphokine activated killer (LAK) cells.
Presented: Amer. Coll. Surgeons, San Francisco, CA; October, 1984.

22. Lotze, M.T., and Rosenberg, S.A.: In vivo administration of interleukin-2 to humans.

Presented: 4th International Lymphokine Workshop, Klais, West Germany, October 20, 1984.

23. Lotze, M.T., and Rosenberg, S.A.: In vivo use of lymphokines.
Presented: Rochester Cancer Conference, September 28, 1984.

24. Lotze, M.T.: The Use of Human T cell Clones in Cellular Immunotherapy.
Presented: International Workshop on Human T-cell clones; Titisee, West Germany, March 7, 1985.

25. Lotze, M.T.: Current diagnosis and treatment of malignant melanoma.
Presented: St. John's Winter Seminar, Vail Colorado, March 7,1985.

26. Lotze, M.T.: Experience with the Administration of IL-2 to Humans.
Presented: Biogen, S.A. Geneva, Switzerland, February 26, 1985.

27. Lotze, M.T. and Rosenberg, S.A.: Current immunotherapy protocols using IL-2.
Presented: Beckton-Dickinson, Inc., Mountain View, CA May 29, 1985.

28. Lotze, M.T. and Rosenberg, S.A.: Clinical trials with recombinant IL-2.
Presented: Eastern Cooperative Oncology Group Meeting; Clearwater Beach, Florida; November 23, 1985.

29. Lotze, M.T.: IL-2 receptor expression on lymphocytes in patients treated with IL-2.
Presented: NIH Immunology Seminar, Bethesda, MD; December 3, 1985

30. Lotze, M.T.: IL-2 and LAK treatment of patients with cancer.
Presented: Norris Cotton Cancer Center; Dartmouth University; Hanover, NH; December 16, 1985.

31. Lotze, M.T.: Current treatment of hepatoma.
Presented: Georgetown University, Washington, D.C., March 15, 1985.

32. Rosenberg, S.A., Lotze, M.T., Muul, L.M., et al.: A new approach to the therapy of cancer based on the systemic administration of autologous lymphokine activated killer cells and recombinant interleukin-2.
Presented: Society of University Surgeons, Richmond, Virginia, February 3,1986.

33. Lotze, M.T.: LAK and IL-2 in the treatment of cancer.
Presented: Freie Universitat, Berlin, West Germany, March 4, 1986.

34. Lotze, M.T. and Rosenberg, S.A.: Current results with LAK and IL-2 in the treatment of cancer.
Presented: International Workshop on the Clinical Application of Lymphokines and Cytokines,Erlangen, West Germany, March 7, 1986.

35. Lotze, M.T. and Rosenberg, S.A.: Protocol design for phase I/II lymphokine studies in human

cancer.

Presented: Meeting of the IUIS/WHO Lymphokine-Standardization Subcommittee, Erlangen, West Germany, March, 8, 1986.

36. Lotze, M.T.: Administration of LAK and IL-2 to patients with cancer.
Presented: St. Thomas' Hosp. Med. School; London, U.K., March 10, 1986.

37. Lotze, M.T.: IL-2 and LAK therapy.
Presented: D.C. Derm. Society Meeting, Bethesda, MD; March 25,1986

38. Lotze, M.T. and Rosenberg, S.A.: New approaches to the treatment of cancer: LAK and IL-2.
Presented: University of Rochester, Wasyl Pluta Cancer Center, April 16,1986.

39. Lotze, M.T. and Rosenberg, S.A.: IL-2 and LAK in the treatment of cancer.
Presented: St. Mary's Hospital, University of Rochester, April 16, 1986.

40. Roberts, K., Lotze, M.T. and Rosenberg, S.A.: Lymphokine activated killer tumor cell conjugates enumerated by flow cytometry. Fed. Proc.45:719, 1986.
Presented: 70th Annual Meeting, FASEB Meeting, St. Louis, MO; April 16, 1986.

41. Lotze, M.T.: Tumor Immunology.
Presented: FAES Course, IMM 522; Cell Biol. of Immun. and Inflamm. April 22, 1986.

42. Lotze, M.T., Carrasquilo, J.A., Weinstein, J.N., et al.: Monoclonal antibody imaging of human melanoma: Radioimmunodetection by subcutaneous or systemic injection.
Presented: 106th Meeting of the Amer. Surg. Assoc., Hot Springs, VA, April 24,1986.

43. Ognibene, F.P., Rosenberg, S.A., Skibber, J.M., Shelhammer, J.H., Lotze, M.T. and Parrillo, J.E.: Interleukin-2 hemodynamics mimic septic shock. Clin. Res. 34:413A, 1986.
Presented: American Federation Clinical Research, Washington, D.C., May 3, 1986.

44. Lotze, M.T. and Rosenberg, S.A.: Intraperitoneal administration of interleukin-2 in patients with cancer.

Presented: 39th Annual Cancer Symposium, Society of Surgical Oncology, Washington, D.C., May 12, 1986.

45. Lotze, M.T.: Possible clinical applications of Interleukin-2.
Presented: "Lymphokines", Breakfast Session, Society of Surgical Oncology, Washington, D.C., May 14, 1986.

46. Ognibene, F.P., Rosenberg, S.A., Skibber, J.M., Shelhamer, J.H., Lotze, M.T. and Parrillo, J.E.: Interleukin-2 produces hemodynamic changes similar to septic shock in humans.
Presented: Society of Critical Care Medicine, Washington, D.C., May 27, 1986.

47. Lotze, M.T.: Current status of immunotherapy protocols.
Presented: Glenolden Labs, E.I.DuPont, Glenolden, PA, May 29, 1986.

48. Lotze, M.T.: Clinical applications of interleukin-2.
Presented: Grand Rounds, Mary Imogene Bassett Hospital, Cooperstown, NY, July 2, 1986.

49. Lotze, M.T. and Rosenberg, S.A.: Immunotherapy of cancer with high dose interleukin-2.
Presented: Sixth International Congress of Immunology, Toronto,Canada, July 7-8, 1986.

50. Lotze, M.T. and Rosenberg, S.A.: Immunotherapy of cancer with LAK cells and recombinant IL-2.
Presented: Chemotherapy of experimental and clinical cancer. Gordon Conference, New London, NH, July 20-25, 1986.

51. Lotze, M.T. and Rosenberg, S.A.: LAK cells and IL-2 in cancer therapy.
Presented: Congress on Research in Lymphokines and Other Cytokines, Basic Biology and Strategies for Clinical Application, Boston,MA, August 13, 1986.

52. Lotze, M.T. Clinical trials with IL-2 and monoclonal antibodies.
Presented: Oncogen, Seattle, Washington; August 21, 1986.

53. Lotze, M.T. Overview of LAK and IL-2 Therapy.
Presented: Ochsner Clinic; New Orleans, LA; October 20, 1986.

54. Lotze, M.T., Sugarbaker, P.H., Shawker, T.H. and Fortula, R.H.: Demonstration of intraoperative ultrasound imaging, CO_2 laser surgery and CUSA ultrasonic dissection for a right hepatic lobectomy for hepatoma.
Presented: Spectacular Problems in Surgery 72nd Annual Congress, American College of Surgeons, October 21, 1986.

55. Lotze, M.T., Biology of IL-2 and rationale for its clinical application.
Presented: In New Approaches to the Immunotherapy of Cancer; Conferences of the Combined Clinical Staff, NIH; October 28, 1986.

56. Lotze, M.T., Robert, K., Custer, M.C., Segal, D.A. and Rosenberg, S.A. Specific binding and lysis of human melanoma by IL-2 activated cells coated with anti-T3 or anti-Fc receptor crosslinked to anti melanoma antibody: A possible approach to the immunotherapy of cancer.
Presented: 20th Annual Meeting of the Association for Academic Surgery; Washington D.C., November 6, 1986.

57. Vetto, J.T., Papa, M.Z., Lotze, M.T., Chang, A.E. and Rosenberg, S.A. Reduction of toxicity of interleukin 2 and lymphokine activated killer cells in human by the administration of corticosteroids.
Presented: 20th Annual Meeting of the Association for Academic for Academic Surgery; Washington D.C., November 6, 1986.

58. Skibber, J.M., Lotze, M.T., Uppenkamp, I., Ross, W. and Rosenberg, S.A. Identification of human lymphokine activated killer cells: Implications for the immunotherapy of cancer.
Presented: Resident Research Award 20th Annual Meeting of the Association for Academic Surgery; Washington, D.C.; November 6, 1986.

59. Lotze, M.T. Treatment of hepatocellular carcinoma.
Presented: Hepatocellular Carcinoma; Conf. Combined Clinical Staff, NIH; Dec. 3, 1986.

60. Cohen, P., Lotze, M., Rosenberg, S., and Jaffee E.: The immunopathology of sequential tumor biopsies in patients treated with interleukin-2.
Presented: 76th Annual Meeting Int. Acad. Pathology; Chicago; March 9, 1987.

61. Lotze, M.T. Clinical use of interleukin-2.
Presented: Joint Mtg. French and Swiss Soc. of Immunology; Geneva, April 23, 1986.

62. Tomita, S., Lotze, M.T. and Rosenberg, S.A.: Clonal analysis of tumor infiltrating lymphocytes against human malignant melanoma. Fed. Proc. 46:1195, 1987.
Presented: 71st Annual Meeting FASEB; Washington, D.C. March 1, 1987.

63. Wiebke, E.A., Lotze, M.T. and Rosenberg, S.A.:Human tumor susceptibility to lymphokine activated killer (LAK) lysis: interferon and tumor necrosis factor decrease NK but not LAK lysis. Fed. Proc. 46:1510, 1987.
Presented: 71st Annual Meeting FASEB; Washington, D.C.; March 2, 1987.

64. Lotze, M.T. Adoptive Immunotherapy of Cancer.
Presented:4th Annual Advances in Cancer Treatment Research Symposium; New York, March 27, 1987.

65. Lotze, M.T. Current status of NIH trials using IL-2.
Presented: Rec. Adv. in Cancer Ther.; University of Colorado; Denver, March 10, 1987.

66. Lotze, M.T.: New approaches to the immunotherapy of cancer.
Presented: American Cancer Society; Rockville, MD, March 7, 1987.

67. Lotze, M.T.: Adoptive immunotherapy.
Presented: Keynote Address: 2nd International Head & Neck Oncology Research Conference. Arlington, Virginia; September 10-12, 1987.

68. Garra, B.S., Insana, M.F., Fisher, B., Lotze, M.T., Shawker, T.H., Wagner, R.F., Russell, M.A.: Quantitative ultrasonic detection of liver changes in patients undergoing interleukin-2 therapy.
Presented: 13th International Symposium on Ultrasound Imaging and Tissue Characterization. Arlington, VA; June 7, 1988.

69. Lotze, M.T.: Disturbing homeostasis: New approaches to the immunotherapy of cancer.
Presented: Distinguished Visting Professor; Uniformed Services, University for the Health Sciences, Bethesda, MD; January 28, 1988.

70. Lotze, M.T.: 1) Therapy with monoclonal antibodies and IL-2; and, 2) Clinical use of lymphokines.
Presented: Bristol Myers Spring Scientific Symposium, Wallingford, CN; March 3, 1988.

71. Lotze, M.T.: Disturbing hemostasis: New approaches to the immunotherapy of cancer.
Presented: Immunotherapeutics; Spring Branch Memorial Hospital, Houston, TX; March 19, 1988.

72. Lotze, M.T.: New approaches to the immunotherapy of cancer.
Presented: Yale University, March 22, 1988.

73. Lotze, M.T.: Immunotherapy of cancer.
Presented: Cancer Center Grand Rounds Howard University, Washington, DC; March 31, 1988.

74. Lotze, M.T.: Preclinical studies with Interleukin-4.
Presented:Eastman Pharmaceuticals, Great Valley,PA April 12, 1988.

75. Lotze, M.T.: Disturbing homeostasis: recent results of ongoing immunotherapy trials at the NCI.
Presented: Recent Updates in Basic Research and Clinical Development of Biological Response Modifiers, Chicago, IL; April 13, 1988.

76. Lotze, M.T.: Disturbing homeostasis: Current status of NCI immunotherapy trials.
Presented: Interleukin-2: Clinical and Biological Update, Roswell Park Memorial Institute, Buffalo, NY; April 20, 1988.

77. Lotze, M.T.: Human tumor antigens defined by cytotoxic and proliferative T cells. J. Cell Biochem 12E:121, 1988.
Presented: Cetus-Triton Biosciences UCLA Symposium Human Tumor Antigens and Specific Tumor Therapy, Keystone, CO; April 26, 1988

78. Kawakami, Y., Custer, M., Rosenberg, S.A., and Lotze, M.T.: Human interleukin-4 (IL-4) inhibits Interleukin-2 (IL-2) induction of human lymphokine activated killer (LAK) activity from peripheral blood and spleen cells. FASEB JI2:A660, 1988.
Presented: FASEB Meeting; Las Vegas, Nevada; May 2, 1988.

79. Jablons, D., Keenan, A., Yolles, P.S., Fisher, B., and Lotze, M.T.: The use of computerized Tech-99 DISIDA hepatobiliary scanning to evaluate liver function in the preoperative evaluation of patient's undergoing liver resection.
Presented: 41st meeting of the Soc. of Surg. Oncology, New Orleans, LA.

80. Lotze, M.T.: Immunotherapy of melanoma.
Presented: Melanoma Update, St. Louis Community Oncology Program, St. Louis, MO; June 10, 1988.

81. Sakahara, H., Carrasquillo, J.A., Lotze, M.T., Reynolds, J.C., Bryant, G., Perentesis, P., Lerario,

L., Green, S., and Larson, S.M.: Effect of Interleukin-2 on biodistribution of I-131 labeled monoclonal antibody 9.2.27. J. Nucl. Med. 29:897, 1988.
Presented:Society of Nuclear Medicine, San Francisco, CA; June 1988.

82. Sakahara, H., Reynolds, J.C., Carrasquillo, J.A., Lora, M., Lotze, M.T., and Larson, S.M.: In vitro complex formation and serum clearance of mouse monoclonal antibody. J. Nucl. Med. 29:758, 1988.
Presented:Society of Nuclear Medicine, San Francisco, CA; June 1988;

83. Huang, C,M., Ruddel, M., Sliva, C., Elin, R.J., Lotze, M.T., and Rosenberg, S.A.: The effect of Interleukin-2 (IL-2) on tests of liver function.
Presented: American Association of Clinical Chemistry

84. Lotze, M.T.: Immunotherapy of cancer.
Presented: 14th SVU World Cong., Chevy Chase, MD; September 15, 1988.

85. Lotze, M.T.: Use of lymphokines in therapy.
Presented: XIII International Congress of Allerology and Clinical Immunology, Montreux, Switzerland; October 21, 1988.

86. Lotze, M.T.: Clinical application of lymphokines.
Presented: VIth International Lymphokine Workshop, Evian, France; October 25, 1988..

87. Kawakami, Y., Rosenberg, S.A., and Lotze, M.T.: Interleukin-4 (IL-4) promotes the growth of TIL specific for human autologous melanoma.
Presented: 6th International Lymphokine Workshop, Evian, France; October 25, 1988.

88. Kawakami, Y., Rosenberg, S.A., and Lotze, M.T.: Interleukin-4 (IL-4) promotes the growth of tumor infiltrating lymphocytes (TIL) specific for human autologous melanoma.
Presented: 6th International Lymphokine Workshop, Evian, France; October 26, 1988.

89. Lotze, M.T.: Current Status of Immunotherapy Trials by the Surgery Branch of NCI.
Presented: President's Cancer Panel; Chair, Dr. Armand Hammer; November 7, 1988.

90. Jablons, D.J., McIntosh, J.D., Mute, J.J., Nordan, R.P., Rudikoff, and Lotze, M.T.: Induction of Interferon B_2/interleukin-6 (IL-6) by cytokine administration and detection of circulation interleukin-6 in the tumor bearing host.
Presented: Regulation of the Acute Phase and Immune Responses: A new Cytokine; New York Academy of Sciences, NY; December 12, 1988.

91. Lotze, M.T.: IL-4 regulates responsiveness to IL-2.
Presented:NIH-Wide Immunology Seminar Series, Bethesda, MD. December 13, 1988.

92. Lotze, M.T.: T Cell reactivity against human cancer.
Presented: Hammer Symposium; LaJolla, CA, January 5, 1989.

93. Lotze, M.T.: Interleukin-2 /LAK cell therapy.

Presented: Oncology Viewpoints, Mod. W.L. McGuire, San Antonio, TX, Jan. 10, 1989.

94. Lotze, M.T.: LAK cells.
Presented: Student Immunology Lecture Series; Bethesda, MD; February 8, 1989.

95. Lotze, M.T.: Cardiac and hemodynamic effects of IL-2.
Presented: Gerontology Research Center, NIA; Baltimore, MD, February 9, 1989.

96. Cornetta, K., Culver, K., Morecki, S., Kasid, A., Morgan, R., Aebersold, P., Lotze, M.T., Rosenberg, S., Anderson, W.F. and Blaese, R.M.: Retroviral vectors and Human Tumor infiltrating lymphocytes: In vitro findings.
Presented: 30th Annual Meeting, American Society of Hematology.

97. Rosenberg, S.A., Lotze, M.T., Yang, J., Chang, A.E., Seipp, C., Simpson, Results of treatment of 650 patients with interleukin-2.
Presented: 109th Annual Meeting, American Surgical Assoc.

98. Lotze, M.T.: "Studies of T Cell Growth Factors: New Approaches Using IL-2, IL-4 and IL-6".
Presented: University Wisconsin Oncology Grand Rounds, Madison Wisconsin, January 25, 1989.

99. Jablons, D., Bolton, Mertons, S., Rubin, M., Pizzo, P., and Lotze, M.T.: Interleukin-2 (IL-2) administration to cancer patients alters neutrophil FcR expression, superoxide response and chemotaxis.
Presented: 73rd Annual Meeting, FASEB, New Orleans; March 23, 1989.

100. Lotze, M.T.: Immunotherapy of cancer.
Presented: Memorial-Sloan Kettering Institute, NY. May 19, 1989.

101. Lotze, M.T., and Balch, C.: Cochairs, T cells and Tumor infiltrating lymphocytes, Minisymposium.
Presented: American Assoc. Cancer Research Annual Meeting, San Francisco, May 25, 1989.

102. Lotze, M.T.: Toxicity of IL-2 treatment.
Presented: Safety Assessment of Cytokines, USUHS, Bethesda, MD, May 23, 1989.

103. Lotze, M.T.: Biologic therapy: An Effective Fourth Modality of Cancer Treatment.
Presented: 75th Anniversary, Daniel Van Hoed Cancer Radiobiologic Institute; Rotterdam, The Netherlands, June 2, 1989.

104. Lotze, M.T.: Biologic Therapy of Cancer
Presented: Ohio State University, Columbus Ohio, June 5, 1989.

105. Lotze, M.T.: Preclinical and clinical application of IL-4.

Presented: Therapeutic Applications Meeting Biologic Resp. Mod. Program; Frederick MD, June 15, 1989.

106. Lotze, M.T.: Cytokine therapy of patients with cancer.
Presented: Plenary Session, Immune Intervention; 7th International Congress of Immunology Berlin; August 1, 1989.

107. Kawakami, Y., Lotze, M.T.: Interleukin-4 promotes growth of human tumor infiltrating lymphocytes.
Presented: 7th International Congress of Immunology, Berlin; August 4, 1989.

108. Lotze, M.T.: Mechanisms of Immunologic Antitumor therapy: Lessons from the laboratory and clinical applications.
Presented: 2nd International Conference on Cells Invading the Rejecting allograft; Pittsburgh, September 15, 1989.

109. Lotze, M.T.: Immunologic effects of IL-4 in man
Presented: NIH Immunology noon seminar; October 24, 1989.

110. Rubin, J., Lotze, M.T.: Interleukin-2 and the adoptive therapy of cancer.
Presented: Int. Interleukin-2 Symposia. Manchester, United Kingdom; October 25, 1989.

111. Lotze, M.T.: Cytokines and Cancer Therapy.
Presented: Williamsburg Immunology Conference, Williamsburg, November 18, 1989.

112. Lotze, M.T.: Biologic Therapy: An effective fourth modality of cancer treatment.
Presented: Surgical Grand Rounds, Duke University, November 29, 1989.

113. Lotze, M.T.: T cells and the treatment of cancer patients.
Presented: Surgical Grand Rounds, University of Utah, Salt Lake City, Utah; January 31, 1990.

114. Lotze, M.T.: Fundamentals of cancer ontogeny and immunotherapy.
Presented: Graduate Seminar, University of Utah,Salt Lake City, Utah; February 1, 1990.

115. Lotze, M.T.: Use of recombinant human IL-2 and IL-4 in vitro and in vivo to expand TIL's. J. Cellular Biochem, 14B:61, 1990.
Presented: UCLA Symposium on Cellular Immunity; Park City, Utah; and the immunotherapy of Cancer; February 1, 1990.

116. Jablons, D.H., Lotze, M.T.: Enhanced expansion of cells with lymphokine activated killer cell (LAK) activity from human b one marrow and peripheral blood - implications for immunotherapy. J. Cellular Biochem 14:72, 1990.
Presented: UCLA Symposium on Cellular Immunity and the immunotherapy of Cancer; Park City, Utah; February 1, 1990.

117. Lotze, M.T.: Progress in immunotherapy.

Presented: ACS - UVA Conference on cancer; Charlottesville, VA, February 16, 1990.

118. Lotze, M.T.: Application of Biologic therapy to patients with cancer.
Presented: Surgical Grand Rounds, University of Virginia; Charlottesville, VA; February 16, 1990.

119. Lotze, M.T.: Application of cytokines to the treatment of cancer.
Presented: Advances in cancer diagnosis and therapy; Fort Lauderdale FL; March 1, 1990.

120. Lotze, M.T.: Adoptive immunotherapy of cancer.
Presented: 4th Annual advances in cancer treatment research (Montefiore/Albert Einstein); New York, NY: March 8, 1990.

121. Lotze, M.T.: Use of cytokines in cancer treatment.
Presented: First International Cytokine Congress; Florence, Italy; March 26, 1990.

122. Lotze, M.T.: Biologic therapy - an effective form of cancer treatment.
Presented: 14th Annual lectureship, Internal Medicine Group; New Orleans, LA; March 29, 1990.

123. Lotze, M.T.: Advances in cancer immunotherapy.
Presented: Cancer Progress V/ Communitech Market Intelligence Inc; New York, NY; April 23, 1990.

124. Lotze, M.T.: Tumor Immunology
Presented: FAES/Immunology 502; Cell Biology of Immunity and Inflammation; Bethesda, MD; May 1, 1990.

125. Lotze, M.T.: Restricted T cell receptor usage in recognition of human melanoma.
Presented: Dept. of Molecular Genetics and Biochemistry, University of Pittsburgh; Pittsburgh, PA; May 7, 1990.

126. Bolton, E., Custer, M. and Lotze, M.T.: Interleukin-4 (IL-4) alters monocyte phenotype in vitro and in vivo.
Presented: Amer. Assoc. Cancer Res.; Washington, D.C.; May 31, 1990.

127. Stotter, H., Haas, H., Lotze, M.T. and Rosenberg, S.A.: Pretreatment of renal cell cancer (RCC) patients with alpha interferon (IFNá) and Interleukin-2 (IL-2) prior to nephrectomy.
Presented: ASCO, Washington, D.C., May 22, 1990.

128. Lotze, M.T.: Biologic Response Modifiers - Clinical Trial Research.
Presented: Colorectal Cancer Symp./Brown University, Providence, RI; June 2, 1990.

129. Kawakami, Y., Kumar, V., Hood, L., Rosenberg, S.A. and Lotze, M.T.: Unique TCR

rearrangements in melanoma TIL.
Presented: Amer. Assoc. Immunology Mtg; New Orleans, LA, May 6, 1990.

130. Lotze, M.T.: Adoptive Immunotherapy of Cancer.
Presented: Amer. Assoc. Immunology/Plenary Session; New Orleans, LA: May 6, 1990.

131. Lotze, M.T.: T-Time: Use of T-cell growth factors to treat patients with cancer.
Presented: Clinical Center Grand Rounds/NIH; Bethesda, MD; August 1, 1990.

132. Lotze, M.T.: Treatment of HCC (moderator) and immunological modalities of treatment; Radiological diagnosis of HCC (with Irwin Feuerstein).
Presented: Hepatocellular carcinoma in North America; Bethesda, MD; Sept. 26-27, 1990.

133. Choyke, P. L., Miller, D.L, Lotze, M.T., Whites, J. M., Ebbit B. Delayed reactions with non-ionic contrast media in association with IL-2 treatment.
Presented: 76th Scientific Assembly of the Radiol. Soc. of North Amer.; Nov. 25, 1990.

134. Lotze, M.T.: Advances in cancer immunotherapy.
Presented: Amer. Coll. Surgeons Course, San Francisco, CA; October 12, 1990

135. Lotze, M.T.: Adoptive Immunotherapy - Current Status.
Presented: Clin. Immunology Society, Chicago, Illinois; November 9, 1990.

136. Lotze, M.T.: Treatment of metastatic colorectal cancer.
Presented: Annual Pittsburgh Cancer Conference; December 7, 1990

137. Zeh, H.J. III, Lotze M.T., Wang S. Detection of cytokine mRNA in mitogen activated peripheral blood lymphocytes by RT-PCR. J Immunother 11:152, 1992.
Presented: Society of Biologic Therapy, Pittsburgh, PA; November, 1991.

138. Storkus W.J., Lotze M.T. Melanoma Immunogenicity: Melanoma Cells Present Both Endogenously - and Exogenously - Derived Peptides to CD8+ cytolytic T-cells. J Immunother 11:147, 1992
Presented: Society of Biologic Therapy, Pittsburgh, PA; November, 1991.

139. Rubin J.T., Adams S., Simonis T., Lotze M.T. HLA - Polymorphism and Response to IL-2 - Based Therapy in Patients with Melanoma.J Immunother 11:141-142, 1992.
Presented: Society of Biologic Therapy, Pittsburgh, PA; November, 1991.

140. Cai Q, Samulski R.J., Ricordi C, Lotze MT. Adeno-associated Virus (AAV) Can be Used as a Potential Vector to Transfer Genes into Pancreatic Islets. J Immunother 11:122-123, 1992.
Presented: Society of Biologic Therapy, Pittsburgh, PA; November, 1991.

141. Pippin B, Cai Q, Lotze M.T. Evaluation of Immune Reactivity to IL-2 Transfected Tumors. J

Immunother 11:137-138, 1992.
Presented: Society of Biologic Therapy, Pittsburgh, PA; November, 1991.

142. Pockaj B.A., Lotze M.T., Yang J, Steinberg S, Rosenberg S.A. A Prospective Randomized Trial Evaluating Crystalloid versus Colloid Fluid Resuscitation for Interleukin-2 Based Therapy. J Immunother 11:138-139, 1992.
Presented: Society of Biologic Therapy, Pittsburgh, PA; November, 1991

143. Leder G.H., Finley G.C., Rubin J.T., Pipas J.M., Law J, Lotze M.T. Mutant p53 as a Target for Immune Recognition. J Immunother 11:131-132, 1992.
Presented: Society of Biologic Therapy, Pittsburgh, PA; November, 1991

144. Elder E.M., Kuebbing D., Lotze M., Whiteside T.L. Selection of Neomycin-Resistant TIL Obtained from Human Melanoma and Cultured in the Presence of IL-2 and IL-4. J Immunother. 11:125, 1992.
Presented: Society of Biologic Therapy, Pittsburgh, PA; November, 1991

145. Tahara, H. Zeh III, HJ, Mueller Gm, Gately MK, Gubler U, Wolf S, Robbins PD and Lotze MT. Cancer Vaccination using Interleukin-12 (IL-12) Gene Transfer.
Presented: Cold Spring Harbor Laboratory. September 22, 1992.

146. Storkus, WJ, Hauser, T, Lotze, MT, and Dawson JR. The role of peptide-self in class I-mediated NK resistance.
Presented: NK Workshop, Ft. Lauderdale, Fl., October 5, 1992.

147. Pippin B.A., Kuebbing D., Nishihara K., Hurd S.D., Lotze M.T. Transfection of Interleukin-4 into fibroblast for cytokine gene therapy of cancer. J Immunother 13:69, 1993.
Presented: Society of Biologic Therapy, Williamsburg, VA; Nov. 1992.

148. Berman R.M., Zeh H.J., Storkus W.J., Lotze M.T. Interleukin-10 Induces Lymphokine Activated Killer (LAK) Cell Activity. J Immunotherapy 13:56, 1993.
Presented: Society of Biologic Therapy, Williamsburg, VA; Nov. 1992.

149. Oppenheim M., Rao P., Lotze M.T. Serum Hyaluronan Levels Increase with Interleukin-2 Therapy. J Immunotherapy 13:68,1993.
Presented: Society of Biologic Therapy, Williamsburg, VA; Nov. 1992.

150. Lotze MT. T-Cell Growth Factors and the Treatment of Cancer.
Presented: Cancer Ctr Grand Rounds, Univ. of Michigan, Ann Arbor, MI, Jan. 22, 1993.

151. Lotze M.T. IL-2 and IL-12 in the Treatment of Cancer.
Presented: Cetus/Chiron Corp.; Emeryville, CA; January 28, 1993.

152. Lotze MT and Herberman RB. 1) Overview of cytokine treatment: IL-2 to IL-12 2) Adoptive

Immunotherapy of Cancer.
Presented: Molecules to Medicine Symposium. Second international Congress on Biol. Response Modifiers. San Diego CA, January 29-31, 1993.

153. Lotze MT. 1) New approaches to cytokine therapy; 2) Current status of adoptive immunotherapy.
Presented: Biologic Response Modifiers Steering Committee/Eastern Cooperative Oncology Group Meeting; Atlanta, GA. February 10-11, 1993.

154. Tahara H, Zeh H, Pappo I, Nastala C, Robbins PD, Lotze MT. Tumor growth alteration with local Interleukin-12 secretion achieved by gene transfer.
Presented: Society of University Surgeons; Montreal, Quebec; February 11-13, 1993.

155. Lotze MT. Workshop on Antagonists of Cytokine Function.
Presented: Keystone Symposium On "Cytokines and Cytokine Receptors: From Cloning to the Clinic"; Keystone, CO; February 6, 1993.

156. Lotze MT. Transfer of Gene Marked TILs; Current Status and Future Goals.
Presented: International Congress on "Biological Response Modifiers: Present Clinical Use and Future Developments"; Naples, Italy; February 23, 1993.

157. Lotze M.T. Gene Therapy of Cancer - Immunological Approaches.
Presented: NCI Gene Therapy Working Group; Rockville, MD; March 1, 1993.

158. Storkus W.J. and Lotze M.T. Identification of Human Melanoma derived Epitopes Recognized by HLA-A2 Restricted , CD8+ Tumor Infiltrating Lymphocytes. J. Cell Biochem. 17D: ,1993.
Presented: Keystone Symposium on "Cellular Immunity and Immunotherapy of Cancer"; Taos, NM; March 19, 1993.

159. Lotze M.T. Modulation of Murine Reactivity to Tumor and Transplantation Antigens. J. Cell. Biochem.17D: ,1993.
Presented: Keystone Symposium on "Cellular Immunity and Immunotherapy of Cancer"; Taos, NM; March 19, 1993.

160. Lotze M.T. and Whiteside T.L. Immunology and Biological Therapeutics.
Presented: PCI Scientific Retreat; Nemacolin, PA; March 28, 1993.

161. Lotze M.T. Immunotherapy of Melanoma. Melanoma Res. 3:5-6, 1993.
Presented: Third International Conference on Melanoma; Special Lecture; Venice, Italy; April 3, 1993.

162. Lotze M.T., Cai Q., Elder E., Rubin J, Pippin B., Jacob W., Chen Y., Nishihara K., Siegfried J., Storkus W., Edington H, Rosenstein M, Nastala C, Pappo I, Zitvogel L., Robbins P., Tahara H. Gene Therapy of Cancer - Immunological Approaches. J. Cell. Biochem. 17E:184, 1993.
Presented: Keystone Symposium on "Genetically Targeted Research and Therapeutics: Antisense and Gene Therapy"; Keystone, CO; April 12, 1993.

163. Ragni M.V., Lotze M.T. Hemophilia: An Important Target for Gene Therapy. J. Cell. Biochem. 17E:216,1993.
Presented: Keystone Symposium on "Genetically Targeted Research and Therapeutics:Antisense and Gene Therapy"; Keystone, CO; April 12, 1993.

164. Tahara J., Zeh H. III, Pappo I., Nastala C., Robbins P.D., Lotze M.T. Tumor Growth Alteration with Local Interleukin 12 Secretion Achieved by Gene Transfer. J Cell Biochem. 17E. 247, 1993.
Presented: Keystone Symposium on "Gene Therapy"; Keystone, CO; April 12, 1993.

165. Lotze M.T. Biotherapy of Cancer.
Presented: CILAC XI; 11th Congresos Integrados Latino Americanos De Cancerologia; Cancun, Mexico; May 12, 1993.

166. Lotze MT and Levy R.: New approaches to immunotherapy and vaccines. against cancer. J Immunol, 150: 1A, 1993.
Presented: Joint Meeting of AAI and CIS, Denver, CO; May 22, 1993.

167. Lotze M.T.: A Tale of Two Cytokines: IL-4 and IL-12.
Presented: Multidisciplinary Program in Immunology/Stanford University Medical Center; Stanford, CA; June 2, 1993.

168. Lotze M.T.: Cytokine Gene Therapy of Cancer.
Presented: Monthly Lecture Series, New England Deaconess Hospital/Department of Surgery; Boston, MA; June 10, 1993.

169. Lotze MT: Eluted peptides from the MHC.
Presented: First International Conference on Engineered Cancer Vaccines and AIDS; San Francisco, CA; Sept. 30- October 3, 1994.

170. Pappo I, Tahara H, Nastala C, Robbins PD, Zeh HJ, Lotze MT. Cancer gene therapy with IL-12 alone or in combination with systemic IL-2 administration delays or prevents the growth of murine sarcomas.
Presented: Assoc. Academic Surgery. Hershey, PA; Nov. 13, 1993.

171. Pappo I, Wasserman K, Tahara H, Epperly MW, Bryant J, Lotze MT, Rosenstein MM. The systemic administration or local delivery of IL-12 combined with radiation (RT) delays the growth of a virulent murine melanoma.
Presented: Association Academic Surgery. Hershey, PA; November 12, 1993.

172. Nastala C, Edington H, Storkus WJ, Lotze MT. Recombinant Interleukin-12 (rmIL-12) Mediates Regression of Both Subcutaneous and Metastatic Murine Tumors.
Presented: 79th Annual Clinical Congress; American College of Surgeons. San Francisco, CA; October 10, 1993.

173. Leder GH, Oppenheim M, Rosenstein M, Shah N, Hoffman R, Simmons R, Lotze MT.

Aminoguanidine decreases IL-2 induced nitric oxide production but not the IL-2 induced capillary leak syndrome.
Presented: 3rd Int. Mtg; Biology of Nitric Oxide. Cologne, Germany; October 3, 1993.

174. Lotze MT. Interleukin 4 and Interleukin 12: Cytokines that regulate the immune response. Annals of Hematology 67:A173,S4, 1993.
Presented: Advances in Cytokine Development, Munich, Germany; October 27, 1993.

175. Lotze MT. Interleukin 4 Gene Therapy. Annals of Hematology 67:A171,111, 1993.
Presented: Cytokines and Growth Factors in Cancer: From Basic Research to Clinical Application. Munich, Germany, October 30, 1993.

176. Lotze MT. A Tale of Two Cytokines - IL-4 and IL-12 Regulate Immune Reactivity.
Presented: US-Japan Cancer Cooperative Research Program, "Cell Biology of the Host Antitumor Immune Response". Rockville, MD January 10-12, 1994.

177. Lotze MT. IL4 and IL12 Gene Therapy: Cytokines which Regulate the Immune Response.
Presented: First International Conference on Gene Therapy and Vaccines for Cancer. Washington, DC January 27, 1994.

178. Lotze MT. Gene Altered TIL: Background and Rationale.
Presented: Third International Symposium on The Biology of Renal Cell Carcinoma. Cleveland, OH March 8, 1994.

179. Leder G, Oppenheim M, Rosenstein M, Hoffman R, Lotze M, Beger H. NO does not mediate IL-2 induced antitumor effects. Br. J. Surg 81:102, 1994.
Presented: European Surgical Society, Fall 1994.

180. Smith DC, Jacob HE, Lotze MT, Branch RA, Adedoyin A, Stiff D, Ellis PG, Schwartz K, Trump DL. A phase I trial of interferon-á2a (IFN-á) and all-transretinoic acid (ATRA): A pharmacokinetic assessment. Proc. ASCO 13:134 (#329), 1994
Presented: American Society of Clinical Oncology, May 1994.

181. Lotze MT. Gene Altered TIL: Background and Rationale.
Presented: Third International Symposium on The Biology of Renal Cell Carcinoma. Cleveland, OH March 8, 1994.

182 Lotze MT. Cytokine therapy of Cancer - IL-4 and IL-12 Regulate the Immune Response. Brit. J. Cancer 69:Supplement XXI, 2(S6), 1994.
Presented: BACR/ACP Annual Meeting. Birmingham, United Kingdom; March 28, 1994.

183. Maeurer M, Castelli C., Hurd S., Martin D., Storkus W., Lotze M. In vivo selection of melanoma variants lacking CTL-defined epitopes. FASEB Jl 8:A209 (1203), 1994.
Presented: Experimental Biology 94 (American Assoc. of Immunology); Anaheim, CA; April 24, 1994.

184. Qin L, Chavin KD, Tahara H, Robbins PD, Lotze MT, Bromberg JS. IL-10 gene transfer prlongs cardiac allograft survival. FASEB Jl. 8:A738 (4285), 1994.
Presented: Experimental Biology 94 (American Assoc. of Immunology); Anaheim, CA; April 26, 1994.

185. Vokes E, Hochster H, Lotze M, Figlin R, Rybak ME. Recombinant human interleukin 4 (rhu IL-4) SCH 39400 in non-small cell lung cancer (NSCLC): preliminary results of a phase II investigation. Proc. ASCO 13:334 (#1107), 1994.
Presented: American Society of Clinical Oncology, Dallas, TX; May 1994.

186. Lotze MT. Interleukin 4 and IL-12 regulate immune responses.
Presented: Immunology Seminar, Pittsburgh Cancer Institute; May 1994.

187. Lotze MT. Role of Biologic Agents in Treating Pancreatic Cancer.
Presented: Arthur W. Beauregard International Cancer Conference. Cancer of the Pancreas: Challenge of the Nineties. Newport, Rhode Island; July 5-8, 1994.

188. Zitvogel L, Tahara H, Storkus WJ, Robbins P, Lotze MT. IL-12 Gene Therapy.
Presented: J.P. Lecocq Conference on Gene Therapy, Strasbourg, France; July 5-7, 1994.

189. Suminami Y, Elder EM, Lotze MT, Whiteside TL. Quantitative PCR for expression of the IL4 gene in biopsies of patients receiving genetically modified tumor vaccine.
Presented: Society of Biological Therapy Meeting, Silverado, CA; October 26-30, 1994.

190. Mayordomo Jl, Storkus WJ, Deleo R, Lotze MT, DeLeo AB. A CTL clone specific for the Meth A murine sarcoma successfully treats established metastatic disease.
Presented: Society of Biological Therapy Meeting, Silverado, CA; October 26-30, 1994.

191. Zorina T, Mayordomo Jl, Watkins S, Lotze MT, DeLeo AB, Ildstad ST. Culture of dendritic cells from murine bone marrow supplemented with GM-CSF and TNF-alpha.
Presented: Society of Biological Therapy Meeting, Silverado, CA; October 26-30, 1994.

192. Posner MC, Lembersky B, Landreneau RJ, Mullen E, Oppenheim M, Lotze MT. Combined modality therapy for operable carcinoma of the esophagus and gastroesophageal (GE) junction. Proc. ASCO 12:224 (686), 1993
Presented: American Society of Clinical Oncology, Orlando, May 1993.

193. Lotze MT. T-cell Factors in Cancer Immunotherapy.
Presented: Second International Cytokine Conference. Banff, Alberta October 5, 1994.

194. Berman R, Suzuki T, Tahara H, Robbins P, Lotze M. Human and viral Interleukin-10 (cIL-10 and vIL-10) mediate opposing effects in tumor immunity.
Presented: Second International Cytokine Conference. Banff, Alberta October 4, 1994.

195. Lotze MT, Tahara H, Storkus WJ, Zitvogel L, Suzuki T, Berman R, Robbins PD. The non-ãcR T-

cell growth factors - cytokine gene therapy for cancer and transplantation. Gene Therapy 1:S4(A12), 1994.
Presented: Second Meeting of the European Working Group on Human Gene Transfer and Therapy. London, UK. November 19, 1994.

196. Lotze MT. Cytokine and Cytokine Gene Therapy of Cancer.
Presented: Seventh Meeting of the Japanese Society of Biologic Response Modifiers. Tokushima, Japan. December 2-3, 1994.

197. Lotze MT. The Immune System Connection to Cancer and Transplantation.
Presented: Cancer Research and Treatment; Beyond the Year 2000: Harnessing the Immune System. Sponsored by the Cancer Research Institute and Immunex; January 12, 1995; New York City, New York.

198. Lotze Michael T. Cytokines and Vaccines For Tumor Treatment.
Presented: Committee on Immunology, University of Chicago, January 16,1995; Chicago, IL.

199. Lotze MT. Melanoma: From the clinic to the laboratory and back again.
Presented: Pittsburgh Surgical Society, January 23, 1995.

200. Lotze MT. Cytokines for Cancer Therapy.
Presented: International Biologic Response Modifier Symposium; January 27, 1995, Cancun, Mexico

201. Lotze Michael T. Discussant.
Ciba Foundation Symposium No. 195. T Cell Subsets in Infectious And Autoimmune Diseases, March 6-10, 1995, London, UK.

202. Rubin JT, Brumfield A, Dookeran K, Lotze MT. Tumor targetted delivery of sustained release high-dose 9-aminocamptothecin. Proc. AACR 36:452(2695), 1995
Presented: 86th Annual Meeting of the American Association of Cancer Research, March 21, 1995; Toronto, Canada.

203. Mayordomo J, Frassanito AM, DeLeo RM, Storkus WJ, Lotze MT, DeLeo AB. Development of CTL-defined tumor peptide vaccine models using chemically induced BALB/c sarcomas. Proc. AACR 36:493(2936), 1995.
Presented: 86th Annual Meeting of the American Association of Cancer Research, March 21, 1995; Toronto, Canada.

204. Lotze MT. Tumor Immunology - The New Biology.
Presented: American Association for the Advancement of Science; February 21, 1995; Atlanta, GA.

205. Lotze MT. Effective Cytokine Gene Therapy of Melanoma - The Biologic Paradigm.
Presented: MD Anderson Symposium on Melanoma, February 22-24, 1995.

206. Tahara H, Zitvogel L, Storkus WJ, Robbins PD, Lotze MT. IL-12 gene therapy of cancer: animal models to clinical application.
Presented: International Symposium of Molecular Cell Biology of Macrophages '95. May 18-19, 1995; Japan.

207. Lotze MT. Tumor Immunology and Immunotherapy. Discussion of abstracts.
Presented: American Society of Clinical Oncology; 31st Meeting. May 20-23, 1995; Los Angeles, CA.

208. Mayordomo JI, Storkus WJ, Kast WM, DeLeo AB, Lotze MT. Peptide-pulsed dendritic cells and TAP-deficient cells serve as effective immunogens in tumor vaccines and therapies. Proc. ASCO 14:546(1809).
Presented: American Society of Clinical Oncology; 31st Meeting. May 20-23, 1995; Los Angeles, CA.

209. Zitvogel L, Tahara H, Robbins PD, Davis G, Lotze MT. Cancer gene therapy using a cytokine IL-12 and a costimulatory molecule B7.1. Proc. ASCO 14:226(583).
Presented: American Society of Clinical Oncology; 31st Meeting. May 20-23, 1995; Los Angeles, CA.

210. Lotze MT. Immunotherapy and Gene Therapy in Gynecologic Oncology.
Presented:Treatment of Cancers of Women Conference; June 23-24, 1995; Pittsburgh, PA.

211. Lotze MT. Antigen-specific T-cell responses in University of Pittsburgh tumor vaccine trials.
Presented: Immune Monitoring of Cancer Vaccine Clinical Trials; April 12, 1995; Bethesda, MD.

212. Lotze MT, Tahara H, Storkus WJ, Sitvogel L, Suzuki T, Berman R, Robbins PD. Approaches for IL-12 gene therapy: The non-ãRc T-cell growth factors - cytokine gene therapy for cancer and transplantation.
Presented: IL-12 in Infection: Prospects for Prophylactic and Therapeutic Intervention; May 15-17, 1995; The Cloister; Bethesda, MD.

213. Lotze MT. Vaccine Strategies.
Presented: 95th General Meeting American Society for Microbiology. May 21-25, 1995; Washington Convention Center; Washington, DC.

214. Lotze MT. Genetic Therapy for Cancer: Potential Role of rhIL-12.
Presented: Interleukin Twelve: Clinical Progress and Future Directions. Four Seasons Hotel and Resort; June 3-4, 1995; Irving, TX.

215. Lotze MT. New Regional and Sytemic Treatment for Melanoma.
Presented: Southern Society of Clinical Surgeons. April 10, 1995, Pittsburgh, PA.

216. Lotze MT. IL-4 and IL-12 Gene Therapy

Presented: First PCI Gene Therapy for Cancer Retreat. June 24, 1995, Johnstown, PA.

217. Lotze MT. Gene Therapy of Infectious Diseases and Cancer. Can J Infect Dis. 6:191C, 1995.
Presented: Plenary Session of the 19th International Congress of Chemotherapy, July 17th, 1995, Montreal.

218. Lotze MT. Biologic Therapy of Cancer. A New Role for Dendritic Cells. PCI Grand Rounds; September 1, 1995; Pittsburgh, PA.

219. Couderc F, Amoscato A, Storkus WJ, Hempel JD, Lotze MT. MHC Class I Peptides Identification in Melanoma Cells by Micellar Electrokinetic Chromatography and Laser-induced Fluorescence Detection.
Presented: Eighth Internation Symposium on High Performance Capillary Electrophoresis. January 21-25, 1996; Orlando, FL.

220. Zitvogel L, Storkus WJ, Tahara H, Mayordomo JI, Tjandrawan T, Robbins PD, Lotze MT. Cancer Vaccines Engineered with IL-4/IL-12+B7.1: Towards the Adaptive Immunotherapy Using Genetically Modified Dendritic Cells.
Presented: 2nd European Conference on Gene Therapy of Cancer; King=s College, Strand, London; September 7, 1995.

221. Doughty LA, Patrene K, Boggs SS, Tahara H, Lotze MT, Evans CH, Robbins PD. The effect of constitutive expression of viral IL-10 or soluble TNF receptor (p75) in mice reconstituted with genetically modified bone marrow stem cells on endotoxin induced IL-6 production. Pediatric Research 37(4):44A, 1995.
Presented: Pediaric Research Society.

222. Nishihara K, Barth RF, Lang JC, Wilkie N, Oda Y, Kikuchi H, Lotze MT. Enhanced *in vitro* and *in vivo* tumoricidal activities of IFN-ã, IL-4, IL-6, and TNF-á gene transfected macrophages.
Presented: 17th Symposium on the International Association for Comparative Research on Leukemia and Related Disease; Gene Therapy: New Frontiers. Dublin, Ireland; September 18-21, 1994.

223. Goydos JS, Finn OJ, Lotze MT. Induction of specific immune reactivity in patients with adenocarcinomas of the breast, pancreas and colon using a synthetic mucin vaccine in a Phase I trial.
Presented: 29th Annual Meeting of the Association for Academic Surgery, Dearborn, Michigan, November 8-11, 1995.

224. Tahara H, Zitvogel L, Robbins PD, Lotze MT. IL-12 gene therapy using direct injection of tumors with genetically engineered autologous fibroblasts. Gene Therapy 2:674(006), 1995.
Presented: The First Annual Meeting 1995 Japanese Society of Gene Therapy, The University of Tokyo, Bunkyo-ku, Tokyo, Japan, May 21, 1995.

225. Lotze MT, Storkus WJ, Tahara H, Amoscato A, Mayordomo HI, Zitvogel L. Molecular vaccines

for cancer - role of IL-12. Immunology 86:Suppl. 1-28(IS42), 1995.
Presented: Joint Congress of the British Society of Immunology and the Nederlandse Vereniging voor Immunologie; Brighton, UK; Dece 6-8, 1995.

226. Finn OJ, McKolanis JR, Nalesnik MA, Clarke MR, Lotze MT, Ochoa AC. T cell defects in advanced breast, pancreatic, and colon cancer and improvements after vaccination with a mucin peptide. Proc. Amer. Assoc.Cancer Research 37:475 (3344), 1996.
Presented: 1996 Annual AACR Meeting; April 21, 1996; Washington, DC.

227. Robbins PD, Ghivizzani SC, Kang R, Storkus WJ, Tahara H, Zitvogel L, Couderc B, Lotze MT. Development of gene therapies for arthritis and cancer.
Presented:Luneborg Symposium on Interdisciplinary Approaches to Gene Therapy. Luneborg, Germany March 25-27, 1996.

228. McKolanis JR, Pecher G, Lotze MT, Finn OJ. Mucin reactive CTL induced by *in vivo* immunization. Proc. Amer. Assoc.Cancer Research 37:466 (3177).
Presented: 1996 Annual AACR Meeting; April 23, 1996; Washington, DC.

229. Zitvogel L, Mayordomo JI, Tjandrawan T, DeLeo AB, Lotze MT, Storkus WJ.Therapy of poorly immunogenic murine tumors with tumor peptide-pulsed dendritic cells: Induction of a specific antitumor immune response mediated by T-cells, Th1-associated cytokines and B7 costimulation. Proc. Amer. Assoc.Cancer Research 37:473 (3225).
Presented: 1996 Annual AACR Meeting; April 22, 1996; Washington, DC.

230. Mayordomo JI, Loftus JI, Sakamoto DJ, Lotze MT, Storkus WJ, Appella E, DeLeo AB.Therapy of murine tumors with p53 wild type sequence peptide-based vaccine. Proc. Amer. Assoc.Cancer Research 37:475 (3244).
Presented: 1996 Annual AACR Meeting; April 23, 1996; Washington, DC.

231. Dookeran KA, Shipe-Spotloe J,Rubin JT, Sikora SS, Kirkwood JM, Lotze MT, Logan T. Low dose systemic interleukin-2 therapy to patients with associated co-morbid conditions. Proc. Amer. Assoc.Cancer Research 37:488 (3330).
Presented: 1996 Annual AACR Meeting; April 21, 1996; Washington, DC.

232. Tahara H, Zitvogel L, Storkus WJ, Elder EM, Kinzler D, Whiteside TL, Robbins PD, Lotze MT. Phase I clinical trial of interleukin-12 (IL-12) gene therapy using direct injection of tumors with genetically engineereed fibroblasts. Proc. ASCO 15:235 (579), 1996.

233. Atkins M, O'Boyld K, Sosman J, Wiss G, Lotze M, Dutcher J, Fisher R. Prospective randomized trila of lisofylline (LSF) for the modulation of interleukin-2 (IL-2) toxicity. Proc. ASCO 15:273(729).

234. Davis ID, Suzuki T, Tahara H, Robbins P, Narula S, Zavodny P., Lotze MT. Murine interleukin-4 (mIL-4)-based therapeutic tumor vaccines generated by transfection of multiple genes into a poorly immunogenic tumor cell line. Proc. ASCO 15:555(1808), 1996.

235. Storkus WJ, Kirkwood JM, Mayordomo JI, Kinzler D, Johnson C, Tahara H, Elder E, Baar J,

Davis J, Paradise C, Shipe-Spotloe J, Lotze MT. Melanoma peptide vaccine: a randomized Phase I evaluation of MART-1, gp100, and tyrosinase peptide vaccines in patients with malignant melanoma. Proc. ASCO 15:556, 1996.

236. Atkins MB, Robertson M, Gordon MS, Lotze MT, Du Bois J, Ritz J, Sandler A, Edington HD, Sherman ML. Phase I evaluation of intravenous recombinant human interleukin-12 (rHIL-12) in patients with advanced malignancy. Proc. ASCO.15:270(718), 1996.

237. Lotze MT. Gene Therapy for Surgical Cancers. The 1st British Journal of Surgery Lecturer; 84th Meeting of the Surgical Research Society; Birmingham, June 27th, 1996.

238 Lotze MT State of the Art Lecture: Gene Therapy and Clinical Medicine. Update in Internal Medicine: Practice in the New Health Care Environment.
Presented October 30th, 1996; Pittsburgh, PA.

239. Shurin MR, Marakovsky E, Lotze MT. FLT3-ligand inhibits tumor progression in murine model. J. Immunotherapy .
Presented: 11th Annual Society of Biological Therapy Meeting, Washington, DC; October 23-26, 1996.

240. Bozik ME, Lotze MT, Chambers WH. Effective treatment of CNS tumor with IL-4 producing glioma vaccine. J. Immunotherapy .
Presented: 11th Annual Society of Biological Therapy Meeting, Washington, DC; October 23-26, 1996.

241. Berman RM, Rilo HL, Hoehnke C, Shurin MR, Naula SK, Maraskovsky E, Lotze MT. Interleukin-10 effects on in vivo generation and in vivo function of dendritic cells. J. Immunotherapy .
Presented: 11th Annual Society of Biological Therapy Meeting, Washington, DC; October 23-26, 1996.

242. Farhood H, Linsley PSS, Storkus WJ, Lotze MT. Immunopotentiation by CD28 and Interleukin 12. J. Immunotherapy .
Presented: 11th Annual Society of Biological Therapy Meeting, Washington, DC; October 23-26, 1996.

243. Cai Q, Presky D, Robbins PD, Lotze MT, Tahara H. Interleukin-12 (IL-12) expression at the tumor site is criticial in natural tumor rejection but not in mouse IL-10 mediated anti-tumor effects. J. Immunotherapy .
Presented: 11th Annual Society of Biological Therapy Meeting, Washington, DC; October 23-26, 1996.

244. Sikora R, Rilo H, Tahara H, Lotze MT, Carty SE. Viral Interleukin-10 (vIL-10) expression in rat pancreatic islets by bioballistic Gene Transfer. Proc. Assoc. Acad. Surg.30:78(30). 1996.
Presented: 30th Annual Meeting Association for Academic Surgery, November 13th-16th, 1996; Chicago, Ill.

245. Chau Gar-Yang, Dooker5an KA, Brumfield A, Tueting T, Lotze MT, Rubin JT. Effective

antitumor activity of interferon alfa plus ethiodol in an animal model. Proc. Assoc. Acad. Surg.30:167(P9). 1996.

Presented: 30th Annual Meeting Association for Academic Surgery, November 13th-16th, 1996; Chicago, Ill.

246. Logan T, Elder E, Whiteside T, Kirkwood J, Lotze M, Friberg D, Hrebinko R, Donnelly S, Becich M, Edington H, Shipe-Spotloe J, Hakala T. Pilot study of *in vitro* sensitization with anti-CD3 (OKT3) stimulated vaccine draining lymph node lymphocytes in patients with metastatic renal carcinoma and melanoma. Proc. ASCO 16:432a (1551),1997.

Presented: ASCO Annual Meeting, May 17-20, 1997; Denver, CO.

247. Dutcher J, Atkins M, Fisher R, Weiss G, Margolin K, Aronson F, Lotze M, Gordon M. IL-2-based therapy in metastatic renal cell cancer (MRCC): Cytokine Working Group (CWG) experience. Proc. ASCO 16:327a (1166),1997.

Presented: ASCO Annual Meeting, May 17-20, 1997; Denver, CO.

248. Tahara H, Zitvogel L, Storkus WJ, Elder EM, Kinzler D, Whiteside TL, Robbins PD, Lotze MT. Antitumor effects in patients with melanoma, head and neck and breast cancer in a Phase I/II clinical trial of Interleukin-12 (IL-12) gene therapy. Proc. ASCO 16:438a (1568),1997.

Presented: ASCO Annual Meeting, May 17-20, 1997; Denver, CO.

249. Atkins M, Lotze M, Wiernik P, Margolin K, Weiss G, Parkinson D, Hawkins M, Paradise C, Rosenberg S. High-dose IL-2 therapy alone results in long-term durable complete responses in patients with metastatic melanoma. Proc. ASCO 16:494a (1780),1997.

Presented: ASCO Annual Meeting, May 17-20, 1997; Denver, CO.

250. Maeurer MJ, Walter W, Trinder P, Seliger B, Lotze MT. Interleukin-7 (IL-7) secretion by epithelial tumors. Potential implications for organ specific immunity.

Keystone Symposia on Cellular Immunology and the Immunotherapy of Cancer III; Copper Mountain, CO; February 1-7, 1997.

251. Robertson MJ, Cameron C, Atkins MB, Gordon MS, Lotze MT, Sherman ML, Ritz J. Immunologic effects of Interleukin-12 administered by bolus intravenous injection to patients with advanced cancer.

Submitted: American Society of Hematology

252. Nishioka Y, Shurin M, Robbins PD, Storkus WJ, Lotze MT, Tahara H. Effective tumor immunotherapy using bone marrow-derived dendritic cells (DC)=s genetically engineered to express Interleukin 12. Journal of Immunotherapy 20:419, 1997.

Presented: 12th Annual Meeting of The Society of Biologic Therapy; Pasadena California October 22-25, 1997.

253. Shurin GV, Esway J, Subbotin VM, Lotze MT, Barksdale EM. Functional Fas ligand is expressed on neuroblastoma cells. Journal of Immunotherapy 20:403, 1997.

Submitted: 12th Annual Meeting of The Society of Biologic Therapy; Pasadena California October 22-25, 1997.

254. Esway J, Shurin GV, Lotze MT, Barksdale EM. Creating immune privilege: Neuroblastoma soluble factors cause apoptosis of Fas-sensitive targets. Journal of Immunotherapy 20:402, 1997.
Submitted: 12th Annual Meeting of The Society of Biologic Therapy; Pasadena California October 22-25, 1997.

255. Numasaki M, Lotze MT, Tahara H. Interleukin 17 gene transfection into murine fibrosarcoma cell line MCA 205 increases tumorigenicity correlated with enhanced tumor microvascularity. Journal of Immunotherapy 20:399, 1997.
Presented: 12th Annual Meeting of The Society of Biologic Therapy; Pasadena California October 22-25, 1997.

256. Kinzler D, Tahara H, Elder E, Johnson C, Nguyen N, Hanan S, Thomas R, Vu H, Duran P, Kirkwood J, Lotze M. Patient recruitment onto a Phase I clinical trial of Interleukin 12 (IL-12) gene therapy for cancer. Journal of Immunotherapy 20:400, 1997.
Presented: 12th Annual Meeting of The Society of Biologic Therapy; Pasadena California October 22-25, 1997.

257. Peron JM, Esche C, Hunter O, Subbotin VM, Lotze MT, Shurin MR. Effective treatment of murine liver metastases using FLT3 ligand (FL) and IL-12. Journal of Immunotherapy 20:400, 1997.
Presented: 12th Annual Meeting of The Society of Biologic Therapy; Pasadena California October 22-25, 1997.

258. Hunter O, Haluszczak C, Subbotin VM, Lfotze MT, Shurin MR. Administration of IL-12 and FLT3 ligand enhances murine dendritic cell generation. Journal of Immunotherapy 20:401, 1997.
Presented: 12th Annual Meeting of The Society of Biologic Therapy; Pasadena California October 22-25, 1997.

259. Baar J, Lotze MT. Interferon gamma inducible cytokine gene expression in plasmid-transfected dendritic cells. Journal of Immunotherapy 20:403, 1997.
Presented: 12th Annual Meeting of The Society of Biologic Therapy; Pasadena California October 22-25, 1997.

260. Esche C, Shurin MR, Haluszczak C, Peron JM, Lotze MT. Generation of human dendritic cells from CD34+ precursors for human clinical trials. Journal of Immunotherapy 20:403, 1997.
Presented: 12th Annual Meeting of The Society of Biologic Therapy; Pasadena California October 22-25, 1997.

261. Shurin MR, Esche C, Lokshin A, Lotze MT. Tumors induce apoptosis of dendritic cells in vitro. Journal of Immunotherapy 20:403, 1997.
Presented: 12th Annual Meeting of The Society of Biologic Therapy; Pasadena California October 22-25, 1997.

262. Hall TD, Kinzler DM, Elder EM, Whiteside TL, Storkus WJ, Lotze MT. Evaluation and

response of patients immunized to HLA-A2 polyepitope peptide mixture in patients with metastatic melanoma using autologous dendritic cells cultured with IL-4 and GM-CSF. Journal of Immunotherapy 20:405, 1997.
Presented: 12th Annual Meeting of The Society of Biologic Therapy; Pasadena California October 22-25, 1997.

263. Campbell RL, Repasky EA, Lotze MT. T-cell spectrin (fodrin) aggregation and uropod formation following dendritic cell encounter. Journal of Immunotherapy 20:405, 1997.
Presented: 12th Annual Meeting of The Society of Biologic Therapy; Pasadena California October 22-25, 1997.

264. Haluszczak C, Lotze MT, Shurin MR. IL-12 and FLT3 ligand differentially stimulate lymphoid and myeloid dendropoiesis in vivo. Journal of Immunotherapy 20:406, 1997.
Presented: 12th Annual Meeting of The Society of Biologic Therapy; Pasadena California October 22-25, 1997.

265. Elder EM, Lotze MT, Whiteside TL. Culture of human dendritic cells (DC) for the therapy of patients with cancer. Journal of Immunotherapy 20:407, 1997.
Presented: 12th Annual Meeting of The Society of Biologic Therapy; Pasadena California October 22-25, 1997.

266. Elder EM, Stolinski LA, Whiteside TL, Lotze MT. Changes in DC precursor numbers during in vivo IL-2 adminstration. Journal of Immunotherapy 20:407, 1997.
Presented: 12th Annual Meeting of The Society of Biologic Therapy; Pasadena California October 22-25, 1997.

267. Kadakia MP, Birkenbach M, Baar J, Farhood H, Lotze MT. Modulation of interleukin-12 by Epstein Barr Virus induced gene production. Journal of Immunotherapy 20:411, 1997.
Presented: 12th Annual Meeting of The Society of Biologic Therapy; Pasadena California October 22-25, 1997.

268. Tahara H, Elder EM, Cai Q, Kinzler DM, Storkus WJ, Zitvogel L, Kirkwood JM, Whitesdie, Robbins PD, Lotze MT. Phase I clinical trial of Interleukin-12 cytokine gene therapy with objective responses in cancer patients with various histologies. Journal of Immunotherapy 20:416, 1997.
Presented: 12th Annual Meeting of The Society of Biologic Therapy; Pasadena California October 22-25, 1997.

269. Osaki T, Péron M.-M., Cai Q, Okamura H, Robbins PD, Kurimoto M, Lotze MT, Tahara H. . Analyses of antitumor effects of interferon-ã-inducing factor/Interleukin-18 against murine tumors. Journal of Immunotherapy 20:417, 1997.
Presented: 12th Annual Meeting of The Society of Biologic Therapy; Pasadena California October 22-25, 1997.

270. Lotze MT. Dendritic Cell Therapy of Cancer.

Presented: 12th Annual Meeting of The Society of Biologic Therapy; Pasadena California October 22-25, 1997.

271. Lotze MT. Life and death in the Fas Lane:Immune Effectors in the Tumor Microenvironment.
Presented: 12th Annual Meeting of The Society of Biologic Therapy; Pasadena California October 22-25, 1997.

272. Lotze MT.Therapy of Cancer with Dendritic Cells.
Presented: Immunologic Attacks on Cancer, Cold Spring Harbor and the Banbury Center; October 19-22, 1997.

273. Lotze MT. Regional Therapy of Cancer.
Presented: University of Hawaii at Manoa; October 27, 1997.

274. Lotze MT. Apoptosis in the tumor microenvironment.
Presented: University of Sapporo; Sapporo, Japan; October 28, 1997.

275. Lotze MT. IL-12 transfected fibroblasts or DC=s for cancer therapy.
Presented: The 27th Annual Meeting of the Japanese Society for Immunology; Sapporo, Japan; October 29, 1997.

276. MT Lotze, T Osaki, J-M Peron, M Shurin, J Baar, H Tahara. Cytokines which induce Interferon-gamma (IFN-ã) - IL-2, IL-12, and IL-18: Regulation of tumor immunity. J. Leucocyte Biology
Presented: 32nd Annual Meeting of the Society for Leucocyte Biology; Baltimore, MD; December 4-7, 1997.

277. Orucevic A, Green AM, Lotze MT, Billiar TR. Nitric oxide induces apoptosis and enhances FAS expression in murine tumor cell lines. Proc Amer Assoc Cancer Res 39:580(3947),1998
Presented:AACR Annual Meeting March 28-April 1, 1998.

278. Farhood H, Hershberger P, Shurin G, Barksdale E, Lotze MT. Ubiquitous intracellular Fas ligand expression by human and mouse tumor cells. Proc Amer Assoc Cancer Res 39:84(569),1998
Presented:AACR Annual Meeting March 28-April 1, 1998.

279. Thomas RL, Lotze MT, Amoscato AA. Identification of oxidized ceramide as the predominant mass spectrometric identified cellular lipid increased in tumor cells undergoing apoptosis.
Presented: FASEB/AAI Annual Meeting, April 19, 1998, San Francisco.

280. M Atkins, J Dutcher, M Gordon, T Goss, T Logan, M Lotze, K Margolin, T Plasse, J Sosman, G Weiss Quality of life (QOL) assessment of patients with renal cancer treated with interleukin-2, interferoná and 5-fluorouracil.
To be presented: Annual ASCO Meeting.

281. Agarwala SS, Von Oosterom A, Petruzelli G, Johnson JT, Fritz MA, Horowitz JA, Rybak ME,

Burke E, Van de Bogaert, Lotze MT. Phase I study of rAd/p53 in patients (pts) with advanced head and neck cancer (HNC).
To be presented: Annual ASCO Meeting.

282. Dookeran KA, Hanan SH, Lotze MT. Effective regional therapy of cancer with sustained-release nitric oxide-donor, nitroprusside in ethiodol.
Presented: 51st Annual Society of Surgical Oncology Meeting, San Diego, March 26-29, 1998.

283. Flaherty LE, Atkins M, Clark J, Dutcher J, Gordon M, Lotze M, Margolin K, Sosman J, Weiss G. Randomized Phase II trial of chemotherapy and outpatient biotherapy with Interleukin-2 (IL-2) and interferon alpha (IFN) in metastatic malignant melanoma (MMM).
Submitted: Annual ASCO Meeting.

284. Flaherty LE, Atkins M, Clark J, Dutcher J, Gordon M, Lotze M, Margolin K, Sosman J, Weiss G. Randomized Phase II trial of chemotherapy and outpatient biotherapy in metastatic malignant melanoma (MMM). Cancer Investigation 16:S1, p28-29, 1998.
Presented: New York Chemotherapy Symposium.

285. Chikamatsu K, Whiteside TL, Storkus W, Lotze MT and DeLeo AB. Generation of human cytotoxic T lymphocytes recognizing wild-type sequence p53 epitopes from peripheral blood lymphocytes using autologous dendritic cells. Proc Amer Assoc Cancer Res 39:84(569),1998
Presented:AACR Annual Meeting March 28-April 1, 1998, New Orleans.

286. Esche C, Lotze MT, Shurin MR. Accumulation of intratumoral dendritic cells in vivo using FLT3 ligand: a new tool for immunotherapy of melanoma and lymphoma. Proc Amer Assoc Cancer Res 39:172(1180),1998
Presented:AACR Annual Meeting March 28-April 1, 1998, New Orleans.

287. Shurin MR, Lokshin A, Esche C, Lotze MT. Tumors induce apoptosis of dendritic cells:role of FLT3-ligand and IL-12 in tumor -associated dendritic cell function. Proc Amer Assoc Cancer Res 39:550(3745),1998
Presented:AACR Annual Meeting March 28-April 1, 1998, New Orleans.

288. Giezeman-Smits KM, Okada H, Brisette-Storkus CS, Villa LA, Attanucci J, Tahara H, Lotze MT, Chambers WH, Bozik ME. Immunity aftainst Interleukin-4 producing 9L rat glioma is mediated by tumor-specific interferon-ã producing CD8+ cells. FASEB J. 12:1622(A278), 1998.
Presented: FASEB/AAI Annual Meeting, April 19, 1998, San Francisco.

289. Péron JM, Subbotin V, Haluszczak C, Lotze MT, Shurin MR. The anti-tumor effect of FLT3-ligand administration on murine liver metastases is mediated in part by NK cells. Digestive Diseases Week.Abstract 1937 (pA-482), 1998.
Presented:Digestive Diseases Week, May 18, 1998, New Orleans.

290. Lotze MT. Immunotherapy of Unresectable Pancreatic Carcinoma. Digestive Diseases Week and the 98th Annual Meeting of the American Gastroenterologic Association. 1998 Consensus Conference Program.

Presented:Digestive Diseases Week, May 18, 1998, New Orleans.

291. Lotze MT. Dendritic cell therapies.
Presented ASCO Education Session on Tumor Vaccines. Saturday May 16, 1998 and Sunday May 17, 1998., Los Angeles.

292. Lotze MT. Dendritic Cell Based Therapy of Cancer.
Presented at the 10th British Cytokine Group Meeting in London; June 18th, 1998.

293. Lotze MT, Ronna Campbell, Andrew Amoscato, Robbie Mailliard, Walter J. Storkus, Hideaki Tahara, Michael Shurin."Dendritic cells Regulate the Immune Response to Cancer"
Presented: 13th Aspen Cancer Conference July 19th, 1998.

294. Odoux C, Lotze MT, Kim PK, Amoscato A, Luketich J, Weigel T. Paclitaxel activates caspase-3 and induces apoptotic death in human lung cancer: Is it really fas dependent?
Presented: Submitted American Thoracic Society, April 23-28, 1999.

295. Dallal R, Christakos P, Lotze MT. Paucity of dendritic cell (DC) infiltrate in pancreatic carcinoma (PCa) predicts poor prognosis. Proc.Assoc of Acad. Surgery 32:207(P7), 1998.
Presented: Association of Academic Surgery Seattle November 19-22, 1998.

296. Lotze MT. Genetically Modified Dendritic Cells as Vaccines.
Presented:Postgraduate Course No. 15 - Molecular Biology for Surgeons: A Primer. 84th Annual Clinical Congress of theAmerican College of Surgeons, Orlando FL; October 27, 1998.

297. Shurin MR, Esche C, Peron J-M, Hunter OC, Lotze MT. FLT3 Ligand (FL) and Interleukin-12 (IL-12) regualte generation, migration, and survival of dendritic cells (DC). Eur. Cytokine Network 9:509 (#229).
Presented: International Cytokine Conference Jerusalem, September 1998.

298. Lotze MT. Enhancement of Immune Response by Cytokines.
Presented: Keystone Symposium, HIV Vaccine Development: Opportunities and Challenges. Keystone, CO. January 8, 1999.

299. Lotze MT. Angiogenesis and the Dendritic Cell System.
Presented: First International Symposium on Anti-Angiogenic Agents. Irving, TX. January 29, 1999.

300. Lotze MT. Direct Delivery of Dendritic Cells to Tumors.
Presented: International Workshop on the Use of Dendritic Cells in Cancer Therapy. Innsbruck, Austria. February 11, 1999.

301. Lotze MT. Recognizing Melanoma – evaluation and treatment.
Presented: Citizens General Hospital, New Kensington, PA. March 9, 1999.

302. Lotze MT. Cytokine Gene Therapy of Cancer.

Presented: Cancer Progress Conference March 22-23, 1999. The Plaza, New York City.

302. Lotze MT. Tumor Vaccines
Presented: American Association for Cancer Research 90th Annual Meeting. Philadelphia, PA. April 10-14, 1999.

303. Lotze MT. The Role of Dendritic Cells in Cancer Vaccines.
Presented: Fifth International Congress on Biological Response Modifiers. Toronto, Canada. April 29-30, 1999.

304. Egawa S. Lotze MT. Future Directions for the Biologic Therapy for Pancreatic Cancer.
Presented: Innovations in GI Cancer Control and Management: Genetics and Pancreatic Cancer. Pittsburgh, PA. May 3, 1999.

305. Lotze MT. Melanoma Vaccines
Presented: Hematology/Oncology Noontime Conference. Darthmouth-Hitchcock Medical Center. Lebanon, NH May 13, 1999.

306. Flaherty LE, Atkins M, Sosman HJ, Clark J, Margolin K, Dutcher J, Gordon M, Lotze M, Weiss G.Randomized Phase II Trial of Chemotherapy and outaptient biotherapy with Interleukin-2 (IL-2) and interferon alpha (IFN) in metastatic malignant melanoma (MMM).
Presented: ASCO, May 14, 1999.

306. Kang W-K, Park C, Lee H, Jang S, Choi K, Kim WS, Yoon SS, Lee H-K, Yang J-Y, Lotze MT, Robbins PS, Tahara H, Kim S, Park K, Park CH. A Phase I Clinical Trial of Gene Therapy with Interleukin-12 Gene-modified Autologous Fibroblasts: Monitoring of the Immune Response.
Presented: American Society of Gene Therapy; Washington, DC. June 11, 1999.

307. Lotze MT. Into Thin Air – Regulation of the Acute and Chronic Inflammatory Response by Interferon γ Inducting Cytokines.
Presented: British Cytokine Group - Perspectives in Cytokine Research. London, UK. June 18-19, 1999.

308. Lotze MT. Advances in Vaccine Therapy for Cancer.
Presented: Surgery Branch/ACS Research Seminar Program. Bethesda, MD. August 27, 1999.

309. Lotze MT. Cytokine Gene Therapy of Cancer Using Fibroblasts or DCs.
Presented: 1999 Meeting of the Institute of Human Virology. Baltimore, MD. September 2, 1999.

310. Mailliard RB, Lotze MT. Major Phenotypic, Morphologic and Functional Differences between DCs Stimulated with Monocyte-condition Medium or Cytokine Cocktail.
Presented: Tumor Escape from Immune Recognition: Molecular Mechanism and Functional Significance Meeting. Baltimore, MD. August 22-23, 1999.

311. Lotze MT. Summary: Antitumor Response in RCC

Presented: First International Kidney Cancer Symposium. Chicago, IL. October 2, 1999

312. Lotze MT. Protection of Effector Cells in the Tumor Microenvironment: DC, Vaccines, Cytokines.
Presented: International Cancer Microenvironment Forum. Pittsburgh, PA. October 4-5, 1999.

313. Lotze MT. Dendritic Cell Therapy: Not Just an Antigen Presenting Cell.
Presented: 6th International Workshop on Langerhans Cells. New York, NY October 9, 1999.

314. Lotze MT. Dendritic Cell Therapy of Cancer
Presented: Surgical Biology Club 47th Annual Meeting. San Francisco, CA October 10, 1999.

315. Lotze MT. Novel Cytokines in the Treatment of Cancer.
Presented: AACR-NCI-EORTC International Conference. Molecular Targets and Cancer Therapeutics. Washington, DC. November 16, 1999.

316. Lotze MT. Dendritic Cells – not just antigen-presenting cells.
Presented: DC Approaches to Immunotherapy. Boston, MA October 31, 1999

317. Numasaki M, Nukiwa T, Robbins D, Lotze MT, Tahara H. CD40L expression by tumor cells elicits potent anti-tumor immunity: IL-12 dependent and IFN-γ-independent mechanism and in cooperation with GMCSF and IL-12. Proc. AACR 91:114 (#725),2000
Presented: AACR 91st Annual Meeting April 1-5, 2000, San Francisco, CA

318. Okada H, Attanucci J, Witham T, Villa L, Erff M, Fellows WK, Lotze MT, Chambers WH, Pollack IF. Effective combination therapy using a dendritic cell vaccine and local interleukin-4 gene delivery for gliomas. Proc. AACR 91:114 (#727),2000
Presented: AACR 91st Annual Meeting April 1-5, 2000, San Francisco, CA

319. Dworacki G, Meidenbauer N, Kuss I, Saito T, Hoffmann T, Gooding W, Lotze M, Whiteside TL. Tumor-induced signaling defects and apoptosis in circulating T cells of patients with metastatic melanoma. Proc. AACR 91:711(#4522),2000
Presented: AACR 91st Annual Meeting April 1-5, 2000, San Francisco, CA

320. Pirtskhalaishvili G, Gambotto A, Yamabe K, Lotze MT, Shurin MR. Protection of dendritic cells (DC) from tumor-induced apoptosis increases the efficacy of DC-based therapy in a murine prostate cancer model. Proc. AACR 91:43(#277),2000
Presented: AACR 91st Annual Meeting April 1-5, 2000, San Francisco, CA

321. Egawa S, Mailiard R, Lotze MT. Peripheral blood monocytes derived dendritic cells generated with interferon-α and granulocyte-macrophage cology-stimulating factor are potent IL-12 producers. Proc. AACR 91:191(#1223),2000
Presented: AACR 91st Annual Meeting April 1-5, 2000, San Francisco, CA

322. Esche C, Cai Q, Subbotin VM, Lotze MT, Shurin MR. Interleukin-12 stimulates predominantly myeloid dendropoiesis while FLT3 ligand stimulates both myeloid and lymphoid dendropoiesis in vivo. Proc. AACR 91:375(#2378),2000
Presented: AACR 91st Annual Meeting April 1-5, 2000, San Francisco, CA

323. Shurin GV, Shurin MR, Lotze MT, Barksdale EM. Neuroblastoma-derived gangliosides inhibit dendritic cell generation and function. Proc. AACR 91:415(#2644),2000
Presented: AACR 91st Annual Meeting April 1-5, 2000, San Francisco, CA

324. Shurin MR, Lotze MT. A new mechanism of antitumor activity of IL-12: Stimulation of the dendritic cell system. Proc. AACR 91:521(#3321),2000
Presented: AACR 91st Annual Meeting April 1-5, 2000, San Francisco, CA

325. Lotze MT. Molecular Targets for Melanoma Therapy; invited speaker inAACR Minisymposia on Melanoma (Chair: Nicholas Hayward)
Presented: AACR 91st Annual Meeting April 1-5, 2000, San Francisco, CA

326. Shurin MR, Esche C., Galaychuk I, Lotze MT. Melanoma-induced inhibtion of the dendritic cell system. Proc. ASCO 36: 556a(#2189),2000
Presented: ASCO 36th Annual Meeting May 20-23, 2000, New Orleans, LA

327. Jonak ZL, Ho YS, Trulli S, McCabe FL, Maier C, Kirkpatrick R, Elefante L, Chen Y-J, Herzyk D, Johansen K, Lotze MT, Johnson RK. IL18 mediates antitumor effects in advanced murine tumor models. J. Immunotherapy, in press.
Presented: SBT 15th Annual Scientific Meeting, Seattle October 28-31, 2000.

328. Shimamura H, Cumberland R, Hiroishi K, Watkins SC, Lotze MT, Baar J. Murine dendritic cells induce the apoptosis of a syngeneic tumor. J. Immunotherapy, in press.
Presented: SBT 15th Annual Scientific Meeting, Seattle October 28-31, 2000.

329. Son Y-I, Mailliard RB, Myers EN, Lotze MT. Dendritic cells with apoptotic tumors have antitumor effects when combined with IL-2. J. Immunotherapy, in press.
Presented: SBT 15th Annual Scientific Meeting, Seattle October 28-31, 2000.

330. Mailliard RB, Egawa S, son Y-I, Bahnson A, Lotze MT. Dendritic cells and T-cell interactions following specific engagement of tumor. J. Immunotherapy, in press.
Presented: SBT 15th Annual Scientific Meeting, Seattle October 28-31, 2000.

331. Zdenka L Jonak, Stephen Trulli, Francis L McCabe, Danuta Herzyk, Robert Kirkpatrick, Louis Elefante, Yi-Jiun Chen, Kyung Johanson, Curtis Maier , Yen Sen Ho, Michael T Lotze, Randall K Johnson. IL-18 is an Immunomodulator of Anti-tumor Response in Advanced Murine Tumor Models
Presented: AACR, New Orleans, 2001.

332. Fujii S-I, Shimizu K, Shimizu T, Lotze MT. Survival of antigen specific CD8+ T cells capable of mediating rapid effector function and tumor elimination.
Pesented: IL10 Meeting, 2001; Milan, Italy.

333. Lotze Michael T. Novel Biologic Approaches in Lung Cancer.
Presented: 2nd International Lung Cancer Congress. Kauai, Hawaii; July 18-21, 2001.

334. Sallusto Federica and Lotze Michael T. Workshop 2.7. Origin and Migration of Dendritic Cells.
Presented: 11th International Congress of Immunology. 22-27 July 2001; Stockholm, Sweden.

335. Lotze Michael T. Interleukin 18 and the regulation of Immunity.
Presented: Trudeau Institute; February, 2001. 100 Algonquin Avenue; Sararanac Lake, NY. 12983.

336. Lotze Michael T. Interleukin 18 promotes immune response to cancer.
Presented: Surgery Branch, NCI. Bethesda MD; August 29, 2001.

337. Lotze Michael T. Dendritic cells mediate cytokine dependent antitumor effects.
Presented: German Immunology Society Meeting, September 29, 2001.

338. Agha-Mohammadi Siamak, Lotze Michael T. Second generation tetracycline-regulated promoters.
Presented: 5th Annual Society of Gene Therapy. June 5-9, 2002; Molecular Therapy 5:S28[76], 2002.

339. Jonak ZL, Trulli S, McCabe FL, Chen Y-J, Elefante L, Tapley P, Herold K, Kirkpatrick R, Johanson K, Herzyk D, Lotze MT, Johnson RJ. Interleukin-18 has curative activity in advanced murine tumors: Association with T/NK/DC cellular infiltrates.
Presented: 93rd Annual Meeting of the American Association for Cancer Research, San Francisco CA, April 6-10, 2002. Proc Amer Assoc Cancer Res 43:438 [2178], 2002.

340. Lotze Michael T. The message is in the medium: Dendrikines including IL-18 regulate immunity.
Presented: First Cellular Therapy Speaker, American Red Cross-Holland Laboratories; Rockville, MD; May 29, 2002.

341. Lotze Michael T. Interleukin 18 Regulates the Immune Response - Preclinical Studies.
Presented: University of Western Australia, June 11, 2002.

342. Lotze Michael T. The Acute and Chronic Immune Response in Cancer - Views of a DC Chauvanist [Evangelist]
Presented: Western Australia Branch, Austalasian Society of Immunology, June 12, 2002

343. Lotze Michael T, Robbie B. Mailliard, Fumiaki Tanaka, Hideaki Tahara, Andrea Gambotto, Sanjay Kumar, Pawel Kalinski. DC-Activating Function of the IL-1 Homologues [IL-1, IL-18, IL-1F7] and NK Cells in the Development of Antitumor Responses.
Presented: 17th Annual Society for Biological Therapy; San Diego; November 9, 2002.

344. Lotze Michael T. Integrating NK and DC into Cancer Therapy. Keynote Speaker.
Presented:6th Annual Regional Biotherapy Symposium, February 22, 2003.

345. Lotze Michael T and Bartlett D. Surgical Forum III; Cochair and Speaker
Presented 53rd Society of Surgical Oncology Meeting; Los Angeles, CA; March 8; 2003.

346. Lotze Michael T. Identifying and Integrating Biomarkers and Surrogates into the Biologic Therapy of Cancer
Presented: Cancer Progress 2003; NY, NY March 17-18, 2003.

347. Lotze Michael T. Cancer as a Chronic Inflammatory Disease. Use of Cell Therapies.
Presented: 62nd Scientific Meeting of Taiwan Surgical Association., March 29-30, 2003; Taipei, Taiwan.